Appendix A

Syndication Source Code

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.Vector;  //most methods of Vector are synchronized
import java.net.*;

/**
 * Servlet to retrieve content from Publisher server
 * Takes 7-9 parameters:
 *
 * db, contentServer, linkBase, SectionID, ArticleID, PartID, mode,
unit, number
 *
 * @author Technology
 * @author ActivedataX.com
 * Last changed 11/9/99
 */

public class ContentNOWjs extends HttpServlet implements Constants
{
    private static int itemsToKeep = 100, minutesToLive = 10; // init()
may set the values later
    private static long lastModified;
 private static Vector contents = new Vector();
 private Sentinel sentinel = new Sentinel(itemsToKeep, minutesToLive);
 private static final ReadURL serverURL = new ReadURL();

 public void doGet(HttpServletRequest req, HttpServletResponse resp)
 throws ServletException, IOException
 {
     String contentID, detail;
     boolean newContent = false;
     Content cont;  //needed for lookup
     Params params = new Params(req);  //decipher the request
  String ContentID = params.contentServer //req.getParameter("Server")
      + "?db=" + params.db
      + "&SectionID=" + params.SectionID
      + "&ArticleID=" + params.ArticleID
      + "&PartID=" + params.PartID
      + "&ln=" + params.linkBase
      + "&mode=" + params.mode;
  if (params.unit != null)
      {ContentID = ContentID  + "&unit=" + params.unit
       + "&number=" + params.number;
      }
  if (params.templateURL == null){
      params.templateURL =
"http://www.lehighvalleynow.com/rol/template4.asp";
  }
  ContentID = ContentID  + "&tpl=" + params.templateURL;
  // parameter tpl will be ignored by serverURL.getContent, used for
internal ID only
        cont = lookup(ContentID);
        if (cont != null)
        detail = cont.detail;
        else
        {
        try
            {   System.out.println(ContentID);
                detail = serverURL.getContent(ContentID);
                detail = convertTojs(detail, params);
                newContent = true;
            }        catch (Exception ex) {detail = ex.toString();}
        }

        //PrintWriter out  = resp.getWriter();  // ServletOutputStream
bombs with \u0018: CharConversionException
        //out.print(detail);
        //System.out.println(detail);
        OutputStream out = resp.getOutputStream();
        out.write(detail.getBytes());
        System.out.println(detail);
        out.flush();
        out.close();

        if (newContent)
        {
        lastModified = System.currentTimeMillis();
        cont = new Content(ContentID, detail, lastModified);
     contents.addElement(cont);
        }
 }

 public long getLastModified(HttpServletRequest req)
    {
        return lastModified/1000*1000;
    }

  private String convertTojs(String htmlText, Params params){
    htmlText = htmlText.replace('\r', ' ');
    htmlText = htmlText.replace('\n', ' ');
    htmlText = swapStrings(htmlText, "\\", backSlash);
    htmlText = swapStrings(htmlText, "\'", apostrophe);
    htmlText = swapStrings(htmlText, "\"", doubleQuote);

    if (params.ArticleID.equals("0")){
    htmlText = JavaScript.openArticle() + makeJavascriptHrefs(htmlText,
params);
    }

    return "document.write (\""  + htmlText + "\");";
  }
    // pre-pend JavaScript.expandHeader() here for use by all header
```

```
items.//

    //+  the above line is skipped mysteriously
    // specific full article, just print
    // parse out href=, get ArticleID, replace with
javascript:expandHeader(ArticleID)

  private String makeJavascriptHrefs(String htmlText, Params params){
    //find "<a", find "href=", find "ArticleID=", find '>'
    //replace href= with javascript:expandHeader(ArticleID)
    int indexBeginA, indexHref, indexArticleID,
            ArticleIDEndsAt, indexEndA, indexClosingA;
    String ArticleID = null;
    String htmlTextLowercase = htmlText.toLowerCase();
    StringBuffer newHtml = new StringBuffer();
    int indexStart = 0;
    indexBeginA = htmlTextLowercase.indexOf("<a ", indexStart);
    indexHref = htmlTextLowercase.indexOf("href=", indexBeginA + 2);
    indexArticleID = htmlTextLowercase.indexOf("articleid=", indexHref +
5) + 10;
    indexEndA = htmlTextLowercase.indexOf(">", indexArticleID);
    indexClosingA = htmlTextLowercase.indexOf("</a>", indexEndA) + 4;
    while (indexBeginA >= 0 && indexBeginA < indexHref
            && indexHref < indexArticleID
            && indexArticleID < indexEndA
            && indexEndA < indexClosingA){
        ArticleIDEndsAt = htmlTextLowercase.indexOf("&",
indexArticleID);
        //ArticleID = 'a' + htmlTextLowercase.substring(indexArticleID,
ArticleIDEndsAt);
        ArticleID = htmlTextLowercase.substring(indexArticleID,
ArticleIDEndsAt);
        newHtml.append(htmlText.substring(indexStart,
indexHref)).append("href=");

        newHtml.append("\\\"javascript:openArticle(\\\'" +
params.templateURL + "?SectionID="
            + params.SectionID + "&ArticleID=" + ArticleID +
"&PartID=2&db=" + params.db + "\\\');\\\"");
        //newHtml.append("\\\"javascript:expandHeader(" + ArticleID +
");\\\"");
        newHtml.append(htmlText.substring(indexEndA, indexClosingA)); //
done with one anchor.

//newHtml.append(JavaScript.appendArticleMain(params.requestURL,
params.db, params.SectionID, ArticleID) );
        //new loop starts over
        indexStart = indexClosingA;
        indexBeginA = htmlTextLowercase.indexOf("<a ", indexStart);
        indexHref = htmlTextLowercase.indexOf("href=", indexBeginA);
        indexArticleID = htmlTextLowercase.indexOf("articleid=",
indexHref + 5) + 10;
        indexEndA = htmlTextLowercase.indexOf(">", indexArticleID);
        indexClosingA = htmlTextLowercase.indexOf("</a>", indexEndA) +
4;
        //else use old value to get the tail.
    }
    //newHtml.append(htmlText.substring(indexClosingA));
    return newHtml.toString();

  }

 Content lookup(String contentID)
 {   Content cont;
     int index = -1;
     for (int i=0; i<contents.size(); ++i)
         {
                cont = (Content)contents.elementAt(i);
             if (contentID.equals(cont.contentID))
             {
                 return (Content)contents.elementAt(i);
             }
         }
      return null;
 }

 public void destroy()
 {
     sentinel.quit = true;
     contents = null;
 }

 class Content
    {
     String contentID, detail;
     long timestamp;
     Content(String contentID, String detail, long timestamp)
        {
         this.contentID = contentID;
         this.detail = detail;
         this.timestamp = timestamp/60000; //converts millis to min
        }
    }

 /**
  * Monitors the content collection, trims and freshes.
  */

 private class Sentinel extends Thread
 {
     int itemsToKeep;
     int minutesToLive;
     boolean quit = false;

     Sentinel(int itemsToKeep, int minutesToLive)
     {
         this.itemsToKeep = itemsToKeep;
         this.minutesToLive = minutesToLive;
```

```
            setPriority(Thread.MIN_PRIORITY);
            start();
        }

          /**
           * The only and single thread
           */

          public void run()
          {
          int itemsToRemove;
          while( !quit ) // this keeps cleanup alive until servlet is
destroyed.
              {
              freshen();
              if (contents.size() > itemsToKeep)
                  trim();
              //System.gc();
              try{
              Thread.sleep(5000);
              }catch (InterruptedException ex) {}
              }
          }

          private void trim()
          {
               int itemsToRemove = contents.size() - itemsToKeep;
               int trimmed = 0;
               for (int i=0; i<itemsToRemove; ++i)
               {
                    contents.removeElementAt(i);
                    Thread.yield();
                    trimmed++;
               }
               if (trimmed > 10) contents.trimToSize();
          }

          private void freshen()
          {
              long currentTime = System.currentTimeMillis()/60000;
              Content cont;
              for (int i=0; i<contents.size(); ++i)
              {
                  cont = (Content) contents.elementAt(i);
                  if (cont.timestamp + minutesToLive < currentTime)
                  {
                      contents.removeElementAt(i);
                      Thread.yield();
                  }
              }
          }

     }
```

```
 public String getServletInfo()
 {
  return "Retrieves content from PublishNOW server";
 }

 public void init(ServletConfig config) throws ServletException
 {
      super.init (config);
      if ( getInitParameter("itemsToKeep") != null )
      {
         try{
            this.itemsToKeep =
Integer.parseInt(getInitParameter("itemsToKeep"));
         }
         catch (NumberFormatException e){
            this.itemsToKeep = 100;
         }
      }
      else this.itemsToKeep = 100;

      if ( getInitParameter("minutesToLive") != null )
      {
         try{
            this.minutesToLive =
Integer.parseInt(getInitParameter("minutesToLive"));
         }
         catch (NumberFormatException e){
            this.minutesToLive = 15;
         }
      }
      else this.minutesToLive = 15;
 }

  String swapStrings(String TextIn, String OldString, String NewString)
  {
  int OldStringStartAt;
  int OldStringLength = OldString.length();
  int NewStringLength = NewString.length();
  String TempText = TextIn;
  OldStringStartAt = indexOfIgnoreCase(TempText, OldString, 0);
  while (OldStringStartAt != -1)
   {
   TempText = TempText.substring( 0, OldStringStartAt) +
        NewString + TempText.substring(OldStringStartAt +
OldStringLength);
   OldStringStartAt = indexOfIgnoreCase(TempText,
              OldString,
              OldStringStartAt + NewStringLength);
   }
  return TempText;
  }

  int indexOfIgnoreCase(String TempText, String subString,
        int StartAt)
  {
  return TempText.toLowerCase().indexOf( subString.toLowerCase(),
StartAt);
  }

}

class ReadURL
 {
    public String getContent(String SourceURL) throws Exception
  {
  URL page;
     BufferedReader in;
  int len;

  page = new URL(SourceURL);
  in = new BufferedReader(new InputStreamReader(page.openStream()));
  long time = System.currentTimeMillis();
  CharArrayWriter chbuffer= new CharArrayWriter();
  char[] cbuf = new char[1024];
  while ((len = in.read(cbuf, 0, 1024)) != -1)
  {
   chbuffer.write(cbuf, 0, len);
  }
  in.close();
  time = (int)(System.currentTimeMillis() - time);
   return chbuffer.toString() + "<etime " + time + "ms/>";
  }
    }

class JavaScript implements Constants{
    static String expandHeader(){
    return "<script language=\\\"JavaScript\\\">function
expandHeader(ArticleID)" +
        "{ArticleID.style.display = (ArticleID.style.display ==
\\\"none\\\")? \\\"\\\":\\\"none\\\"}<\\/script>";
    }

    static String openArticle(){
        return "<script language=\\\"JavaScript\\\">function
openArticle(url)" +
        "{var kk = window.open(url,
\\\'Regiononline\\\',\\\'resizable=yes,menubar=yes,scrollbars=yes,width=
640,height=400\\\');}<\\/script>";

    }

    static String appendArticleMain(String contentServer,
            String db, String SectionID, String ArticleID){
        return "<div ID=\\\"" + ArticleID + "\\\"
style=\\\"display:none\\\">"
        + "<script language=\\\"JavaScript\\\" "
        + "src=\\\"" + contentServer //req.getParameter("Server")
      + "?db=" + db
```

```
        + "&SectionID=" + SectionID
        + "&ArticleID=" + ArticleID.substring(1)
        + "&PartID=2\\\"><\\/script>"
              + endDiv;
    }
}

interface Constants{
  static final String apostrophe = "\\\'";  //used in document.write ()
  static final String doubleQuote = "\\\""; //used in document.write ()
  static final String backSlash = "\\\\";     //used in document.write
()
  static final String beginScript = "<script language=\"javascript\">";
  static final String endScript = "<\\/script>";
  //static final String beginDiv = "<div
  static final String endDiv ="</div>";
  static final String newline = "\r\n";
}
```

Appendix B

```
package com.rnci.products.PublishNow;

import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.util.*;
import java.sql.*;
import java.net.*;
import com.rnci.products.DataModules.ePress;
import com.rnci.products.DataModules.HttpServletDb;

public class jSyndicate extends HttpServletDb {

   private static String controlDb = "rolcontrol";
   private static String controlServer = "stoudt";
   private static String defaultURL =
 "http://jsyndicate.rnci.com/servlet/com.rnci.products.PublishNow.jContent";
   private static String defaultServer = "stoudt";
   private static String defaultDb = "epublish";
   private static String defaultSectionID = "bnews";
   private static String defaultDocumentURL = "http://www.lehighvalleynow.com/rol/template4.asp";

   private static int itemsToKeep = 200, minutesToLive = 3;   //may be set by init() later
   private static long lastModified;
   private static Vector contents = new Vector();
   private Sentinel sentinel = new Sentinel(itemsToKeep, minutesToLive);


   public void init(ServletConfig config) throws ServletException {
     super.init(config);
     if (getInitParameter("itemsToKeep") != null) {
       try {
         this.itemsToKeep = Integer.parseInt(getInitParameter("itemsToKeep"));
       }
       catch (NumberFormatException e) {
         this.itemsToKeep = 100;
       }
     }
     else this.itemsToKeep = 100;

     if (getInitParameter("minutesToLive") != null) {
       try {
         this.minutesToLive = Integer.parseInt(getInitParameter("minutesToLive"));
       }
       catch (NumberFormatException e) {
         this.minutesToLive = 5;
       }
     }
     else this.minutesToLive = 5;
   }

   public void destroy() {
     sentinel.quit = true;
     contents = null;
   }

   //Process the HTTP Get request
   public void doGet(HttpServletRequest req, HttpServletResponse res) throws ServletException,
 IOException {

     String HTMLtext, overRide, SectionID, server, db, templateURL, refererURL, documentURL, redirectURL,
 unit, contentID, newWindow;
     int position, ArticleID, PartID, mode, number;
     boolean newContent = false,  overrideDefaults = true;
     Content cont;
```

```
    refererURL = req.getHeader("REFERER");

    // default is to use URL params
    overRide = req.getParameter("overrideDefaults");
    if (overRide != null)  {
      if (overRide.startsWith("f")) overrideDefaults = false;
    }

    //Document URL
    documentURL = req.getParameter("documentURL");


    else {
      //if (unit.length() < 3) unit = "<p>";
      position = unit.lastIndexOf(",");
      if (position >= 0) unit = (overrideDefaults)? unit.substring(0, position): unit.substring(position
 + 1);
    }

    //The number of teaser delimiters to count
    String numbers = req.getParameter("number");
    if (numbers == null) numbers = "4";
    else {
      position = numbers.lastIndexOf(",");
      if (position >= 0) numbers = (overrideDefaults)? numbers.substring(0, position):
 numbers.substring(position + 1);
    }
    try { number = Integer.parseInt(numbers); } catch (Exception e) { number = 4; }

    Connection cnn = null;
    contentID = newWindow + "," + server + "," + db + "," + SectionID + "," + ArticleID + "," + mode +
 "," + unit + "," + number + "," + templateURL;

    String validated = validateRequest(templateURL, documentURL, refererURL, db, SectionID);
    if (validated.equals("R")) {
      if (documentURL.indexOf("?") != -1) {
        redirectURL = documentURL + "&redirected=yes";
      } else {
        redirectURL = documentURL + "?redirected=yes";
      }
      HTMLtext = " location.href = \"" + redirectURL + "\";";
    }
    else if (validated.equals("E")) {
      HTMLtext = " document.write('<BR><B>A network error occurred in connecting to the database.
 Please try again.</B>'); ";
    }
    else if (validated.equals("N")) {
      HTMLtext = " document.write('<BR><B>This web site is not authorized to display the content
 requested.</B>'); ";
    }
    else {
      cont = lookup(contentID);
      if (cont != null) {
        HTMLtext = cont.detail;
      } else {
        newContent = true;


        if ((SectionID != null) && (db != null) && (server != null)) {
          try {
            cnn = dataConnMan.getConnection(server, db);
            ePress thisOne = new ePress(cnn);

            thisOne.setLink(templateURL);
            thisOne.setDb(db);
          if ((unit != null) && (number > 0)) {      //getTeaser
            HTMLtext = thisOne.getTeasers(SectionID,ArticleID,PartID,mode,unit,number);
          }
          else {                                     //getContent
            HTMLtext = thisOne.getContent(SectionID,ArticleID,PartID,mode);
          }
          HTMLtext = swapStrings(HTMLtext,"&db=","&server=" + server + "&templateURL=" +
URLEncoder.encode(templateURL) + "&db=");
          if (newWindow.toLowerCase().startsWith("y")) {   // add the "target=_blank" to article Hrefs
            HTMLtext = makeArticleHrefs(HTMLtext);
          }
          dataConnMan.freeConnection(server, db, cnn);
        }
        catch (Exception e) {
          HTMLtext = "<!--- Error connecting to database: " + e.toString() + "--" + server + "--->";
        }
      } else {
        HTMLtext = "<!--- The SectionID, server, and db parameters are required. --->";
      }
      HTMLtext = convertTojs(HTMLtext, documentURL, refererURL);
    }


  if (documentURL == null) documentURL = defaultDocumentURL;

  //Should part 1 links bring up a new browser window?
  newWindow = req.getParameter("newWindow");
  if (newWindow == null) newWindow = "no";
  position = newWindow.lastIndexOf(",");
  if (position >= 0) newWindow = (overrideDefaults)? newWindow.substring(0, position):
newWindow.substring(position + 1);

  //The Requested SectionID
  SectionID = req.getParameter("SectionID");
  if (SectionID == null) SectionID = defaultSectionID;
  position = SectionID.lastIndexOf(",");
  if (position >= 0) SectionID = (overrideDefaults)? SectionID.substring(0, position):
SectionID.substring(position + 1);

  //The Requested ArticleID (0 for most recent article)
  String ArticleIDs = req.getParameter("ArticleID");
  if (ArticleIDs == null) ArticleIDs = "0";
  position = ArticleIDs.lastIndexOf(",");
  if (position >= 0) {
    if (overrideDefaults) ArticleIDs = ArticleIDs.substring(0, position);
    else ArticleIDs = ArticleIDs.substring(position + 1);
  }
  try { ArticleID = Integer.parseInt(ArticleIDs); } catch (Exception e) { ArticleID = 0; }

  //The Requested Part (1 for title, 2 for main content)
  String PartIDs = req.getParameter("PartID");
  if (PartIDs == null) PartIDs = "1";
  position = PartIDs.lastIndexOf(",");
  if (position >= 0) {
    if (overrideDefaults) PartIDs = PartIDs.substring(0, position);
    else PartIDs = PartIDs.substring(position + 1);
  }
  try { PartID = Integer.parseInt(PartIDs); } catch (Exception e) { PartID = 2; }

  //Database Server
  server = req.getParameter("server");
  if (server == null) server = defaultServer;
  position = server.lastIndexOf(",");
  if (position >= 0) server = (overrideDefaults)? server.substring(0, position):
server.substring(position + 1);
```

```
    //PublishNow Database
    db = req.getParameter("db");
    if (db == null) db = defaultDb;
    position = db.lastIndexOf(",");
    if (position >= 0) db = (overrideDefaults)? db.substring(0, position): db.substring(position + 1);

    //Forward Link Template URL
    templateURL = req.getParameter("templateURL");
    if (templateURL == null) templateURL = documentURL;   //if no templateURL is supplied, set
templateURL equal to the current document
    position = templateURL.lastIndexOf(",");
    if (position >= 0) templateURL = (overrideDefaults)? templateURL.substring(0, position):
templateURL.substring(position + 1);
    //try { templateURL = URLDecoder.decode(templateURL); }
    //catch (Exception e) { }
    if (templateURL.indexOf("SectionID=") != -1) {  //if article detail page is same as part 1 links
page
        templateURL = templateURL.substring(0,documentURL.indexOf("SectionID=") - 1);
    }

    //The iCount Parameter in ePress.java
    String modes = req.getParameter("mode");
    if (modes == null) modes = "1";
    position = modes.lastIndexOf(",");
    if (position >= 0) {
      if (overrideDefaults) modes = modes.substring(0, position);
      else modes = modes.substring(position + 1);
    }
    try { mode = Integer.parseInt(modes); } catch (Exception e) { mode = 1; }

    //The delimiting string for Teaser requests
    unit = req.getParameter("unit");
    if (unit == null) {}


    }

    PrintWriter out = res.getWriter();
    res.setContentType("text/html");
    //res.setHeader("Cache-Control","no cache");   //only seems to effect images
    out.println(HTMLtext);

    if (newContent) {
      lastModified = System.currentTimeMillis();
      cont = new Content(contentID, HTMLtext, lastModified);
      contents.addElement(cont);
    }

  }

  private String validateRequest(String templateURL, String documentURL, String refererURL, String db,
String SectionID) {
    //returns  "Y", "N", or "E" (connection error)

    String documentHOST = "", SQL = "", refererHOST = "", retchar="N";
    if (refererURL != null) refererHOST = parseHostFromURL(refererURL);
    if (documentURL != null) documentHOST = parseHostFromURL(documentURL);
    if (documentURL != null) {
      SQL = "SELECT authorized_url FROM Syndicated_Content WHERE pubnow_section_name = '" + SectionID +
"' AND active_flg = 'Y' AND pubnow_dbname = '" + db  + "' AND authorized_url LIKE '%" + documentHOST +
"%' AND datetime_up < getdate() AND datetime_down > getdate()";
      Connection cnn = null;
      try {
        cnn = dataConnMan.getConnection(controlServer,controlDb);
        Statement stmt = cnn.createStatement();
        ResultSet rst = stmt.executeQuery(SQL);
        retchar = "N";
        while (rst.next()) retchar = "Y";
        rst.close();
        stmt.close();
        dataConnMan.freeConnection(controlServer,controlDb,cnn);
      }
      catch (Exception e) {
        retchar = "E";
      }
    }

    return retchar;
  }

  private String parseHostFromURL(String targetURL) {
    StringTokenizer tokenizer = new StringTokenizer(targetURL, "/");
    int tokencount = tokenizer.countTokens();
    int i;
    String returnHost = "";
    if (tokencount > 1) {
      for (i = 1; i < 3; i++) returnHost = tokenizer.nextToken();
    } else {
      returnHost = "";
    }
    return returnHost;
  }

  private String makeArticleHrefs(String HTMLtext) {
    int i;
    StringBuffer sb = new StringBuffer();
    for (i = 0; i < HTMLtext.length(); i++) {
       if ((HTMLtext.substring(i,i+1).equals("<"))
        && (HTMLtext.substring(i+1,i+2).equalsIgnoreCase("a"))
        && (HTMLtext.substring(i+3,i+4).equals("H"))
        && (HTMLtext.substring(i+4,i+5).equals("r"))) {
        sb.append("<a target=\"_blank\"");
        i++;
       } else {
        sb.append(HTMLtext.charAt(i));
       }
    }
    return sb.toString();
  }

 public long getLastModified(HttpServletRequest req) {



    return lastModified/1000*1000;
  }

  private String convertTojs(String HTMLtext, String documentURL, String refererURL) {

    HTMLtext = HTMLtext.replace('\r', ' ');
    HTMLtext = HTMLtext.replace('\n', ' ');

    try {
      HTMLtext = swapStrings(HTMLtext,"\\","\\\\");
      HTMLtext = swapStrings(HTMLtext,"\'","\\\'");
      HTMLtext = swapStrings(HTMLtext,"\"","\\\"");
    }
    catch(Exception e) {
      System.out.println(e.getMessage());
    }

    if (refererURL != null) {
      HTMLtext = " if (location.href.indexOf(\"" + documentURL + "\") != -1) { document.write ('" +
HTMLtext + "'); } else { document.write ('<BR><B>This web site is not authorized to display the content
requested.</B>'); } ";
    } else {
      HTMLtext = " document.write ('"  + HTMLtext + "');";
    }
    return HTMLtext;
  }
```

```
String swapStrings(String TextIn, String OldString, String NewString)
{
  int OldStringStartAt;
  int OldStringLength = OldString.length();
  int NewStringLength = NewString.length();
  String TempText = TextIn;
  OldStringStartAt = indexOfIgnoreCase(TempText, OldString, 0);
  while (OldStringStartAt != -1)
    {
    TempText = TempText.substring( 0, OldStringStartAt) +
           NewString + TempText.substring(OldStringStartAt + OldStringLength);
    OldStringStartAt = indexOfIgnoreCase(TempText,
                       OldString,
                       OldStringStartAt + NewStringLength);
    }
  return TempText;
}

int indexOfIgnoreCase(String TempText, String subString,
              int StartAt)
{
  return TempText.toLowerCase().indexOf( subString.toLowerCase(), StartAt);
}

Content lookup(String contentID) {
  Content cont;
  int index = -1;
  for (int i=0; i<contents.size(); ++i) {
    cont = (Content)contents.elementAt(i);
    if (contentID.equals(cont.contentID)) return (Content)contents.elementAt(i);
  }
  return null;
}

class Content {
  String contentID, detail;
  long timestamp;
  Content(String contentID, String detail, long timestamp) {
    this.contentID = contentID;
    this.detail = detail;
    this.timestamp = timestamp/60000;  //converts milliseconds to minutes
  }
}

private class Sentinel extends Thread {
  int itemsToKeep;
  int minutesToLive;
  boolean quit = false;


  Sentinel(int itemsToKeep, int minutesToLive) {
    this.itemsToKeep = itemsToKeep;
    this.minutesToLive = minutesToLive;
    setPriority(Thread.MIN_PRIORITY);
    start();
  }

  public void run() {
    int itemsToRemove;
    while (!quit) { // this keeps cleanup alive until servlet is destroyed
      freshen();
      if (contents.size() > itemsToKeep) trim();
      //System.gc();
      try {
        Thread.sleep(5000);
      }
      catch (InterruptedException ex) { }
      //System.out.println("Sentinel ran at:" + System.currentTimeMillis());
    }
  }
```

```
    private void trim() {
      int itemsToRemove = contents.size() - itemsToKeep;
      int trimmed = 0;
      for (int i=0; i<itemsToRemove; ++i) {
        contents.removeElementAt(i);
        //System.out.println("Removed: " + contents.elementAt(i).toString());
        Thread.yield();
        trimmed++;
      }
      if (trimmed > 10) contents.trimToSize();
    }

    private void freshen() {
      long currentTime = System.currentTimeMillis()/60000;
      Content cont;
      for (int i=0; i<contents.size(); ++i) {
        cont = (Content) contents.elementAt(i);
        if (cont.timestamp + minutesToLive < currentTime) {
          contents.removeElementAt(i);
          //System.out.println("Expired: " + cont.contentID);
          Thread.yield();
        }
      }
    }
  }


  //Get Servlet information
  public String getServletInfo() {
    return "Retrieves content from PublishNow 2.x databases.";
  }
}
```

Appendix C

```
/**
 * Title:        Active Data Syndicator - ADPExport Servlet
 * Description:  Copyright (c) 2001 Active Data Exchange. All rights reserved.
 * Any use without the express written permission of the copyright
 * owner is unlawful.
 * All information contained in the file is confidential to Active Data Exchange
 * Copyright:    Active Data Exchange
 * Company:      Active Data Exchange
 * @author       John E. Wetzel
 * @creation date        10 February 2001
 * @last revision date   13 June 2001
 * @version      3.01
 */

package com.activedatax.products.syndicator.export;

import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.Connection;
import java.util.StringTokenizer;
import java.util.Properties;
import com.activedatax.utils.adxTools;
import java.net.URLEncoder;
import com.activedatax.sql.HttpServletDb;

public class ADPExport extends HttpServletDb {
  private static String sServer;
  private static String sDbName;
  private static String sNoAuthMsg;

  private static final String CONTENT_TYPE = "text/html";

  /**Initialize global variables*/
  public void init(ServletConfig config) throws ServletException {
    super.init(config);
    File f = new File("SyndicatorBG.properties");
    if(!f.exists()) {
      f = new File("I:/SyndicatorBG/SyndicatorBG.properties");
    }
    Properties dbProps = new Properties();
    try {
      InputStream is = new FileInputStream(f);
      dbProps.load(is);
    }
    catch (Exception e) {
      System.err.println("Can't read the properties file from ADPExport servlet. " +
      "Make sure SyndicatorBG.properties is in the CLASSPATH");
       return;
    }
    sServer = dbProps.getProperty("syndicator.database.server");
    sDbName = dbProps.getProperty("syndicator.database.name");
    sNoAuthMsg = dbProps.getProperty("syndicator.adp.noauthmsg");
  }

 /**Process the HTTP Get/Post request*/
  public void doGet(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {

    String sServerRoot = adxTools.getServerRoot(request);
    String sDocumentURL = "";
    String sTargetURL = "";
    String sOfferContentSetIds = "0";
    String sItemIds = "0";
    String sFullNums = "0";
    String sArcNums = "0";

    long lOfferContentSetId = 0;
    long lSerial = 0;
    long lSubId = 0;
    long lItemId = 0;

    int nFullNum = 0;
    int nArcNum = 0;

    boolean bNewWindow = false;
    boolean bShowDates = false;

    //Serial Number Parameter (required)
    try {
      lSerial = Long.parseLong(request.getParameter("j3serial"));
    } catch(Exception e) {
      lSerial = 0;
    }

    //Subscriber Id Parameter (required)
    try {
      lSubId = Long.parseLong(request.getParameter("j3sub"));
    } catch(Exception e) {
      lSubId = 0;
    }

    //Offer Content Set Id Parameter (required)
    sOfferContentSetIds = request.getParameter("j3ocset");
    if (sOfferContentSetIds == null) sOfferContentSetIds = "0";

    //Document URL Parameter (required)
    sDocumentURL = request.getParameter("j3durl");
    if (sDocumentURL == null) sDocumentURL = "";
    sDocumentURL =
ADPExporter.removeParamsFromURL(sDocumentURL,"j3serial,j3sub,j3ocset,j3durl,j3itemid,j3fullnum,j3
arcnum,j3turl,j3newwindow,j3showdates,j3rand");

    //Target URL for Archive Links Parameter (optional)
    sTargetURL = request.getParameter("j3turl");
    if (sTargetURL == null) sTargetURL = sDocumentURL;  //defaults to the requesting document

    //Item Id Parameter per Content Set (optional)
    sItemIds = request.getParameter("j3itemid");
    if (sItemIds == null) sItemIds = "0";

    //Number of Full Articles to Display per Content Set Parameter (optional)
    sFullNums = request.getParameter("j3fullnum");
    if (sFullNums == null) sFullNums = "1";  //default to 1

    //Number of Article Archive Links to Display per Content Set Parameter (optional)
    sArcNums = request.getParameter("j3arcnum");
    if (sArcNums == null) sArcNums = "0";  //default to none

    //Popup new window when an archive link is clicked?  True or False (optional)
    try {
      bNewWindow = (new Boolean(request.getParameter("j3newwindow"))).booleanValue();
    } catch(Exception e) {
      bNewWindow = false;    //default to false
    }

    //Show dates along with archive links?  True or False (optional)
    try {
      bShowDates = (new Boolean(request.getParameter("j3showdates"))).booleanValue();
    } catch(Exception e) {
      bShowDates = false;    //default to false
    }

    response.setContentType(CONTENT_TYPE);
    PrintWriter out = response.getWriter();

    //Expecting these tokenizers to have the same number of tokens.
    StringTokenizer tokenizer = new StringTokenizer(sOfferContentSetIds,":");
    StringTokenizer tFull = new StringTokenizer(sFullNums,":");
    StringTokenizer tArc = new StringTokenizer(sArcNums,":");
    StringTokenizer tItems = new StringTokenizer(sItemIds,":");
    if(tItems.countTokens() != tokenizer.countTokens()) {
      sItemIds = "0";
      for(int a=1;a<tokenizer.countTokens();a++) {
        sItemIds = sItemIds + ":0";
      }
      tItems = new StringTokenizer(sItemIds,":");
    }


    Connection cnn = dataConnMan.getConnection(this.sServer,this.sDbName);
    ADPExporter ADP = new ADPExporter(cnn, sServerRoot, lSerial, lSubId, 0, 0, sDocumentURL,
sTargetURL, 1, 0, bNewWindow, bShowDates, request.getRemoteAddr());

    if(tokenizer.countTokens() > 1) {
      ADP.setAtomicQueryString(sItemIds,"&j3ocset=" + URLEncoder.encode(sOfferContentSetIds) +
"&j3arcnum=" + URLEncoder.encode(sArcNums) + "&j3fullnum=" + URLEncoder.encode(sFullNums));
    }

    int nTk = 0;
    while(tokenizer.hasMoreTokens()) {
      try {
        lOfferContentSetId = Long.parseLong(tokenizer.nextToken());
        try { nFullNum = Integer.parseInt(tFull.nextToken()); } catch(Exception ex) { nFullNum =
1;}
        try { nArcNum = Integer.parseInt(tArc.nextToken()); } catch(Exception ex) { nArcNum =
0;}
        try { lItemId = Long.parseLong(tItems.nextToken()); } catch(Exception ex) { lItemId =
0;}

        ADP.setOfferContentSetId(lOfferContentSetId);
        ADP.setFullNum(nFullNum);
        ADP.setArcNum(nArcNum);
        ADP.setItemId(lItemId);
        ADP.setAtomicPosition(nTk);

        if(ADP.validateADPRequest()) {
          out.println(ADP.getADPContent());
          out.println("document.write('<P>');");
        } else {
          out.println("document.write('" + this.sNoAuthMsg + "');");
        }
      } catch(Exception e) {
        out.println("document.write('<!--- An error occurred while parsing offer content set
ids. --->');");
      }
      nTk++;
    }

    dataConnMan.freeConnection(this.sServer,this.sDbName,cnn);
    ADP = null;
    out.flush();
    out.close();

  }

  public void doPost(HttpServletRequest request, HttpServletResponse response)
          throws ServletException, IOException {
    doGet(request, response);
  }

  /**Clean up resources*/
  public void destroy() {
  }
}
```

```
/**
 * Title:        Active Data Syndicator - ADPExporter Class
 * Description:  Copyright (c) 2001 Active Data Exchange. All rights reserved.
 * Any use without the express written permission of the copyright
 * owner is unlawful.
 * All information contained in the file is confidential to Active Data Exchange
 * Copyright:    Active Data Exchange
 * Company:      Active Data Exchange
 * @author       John E. Wetzel
 * @date         10 February 2001
 * @last revision date    21 June 2001
 * @version      3.01
 */

package com.activedatax.products.syndicator.export;

import com.activedatax.utils.adxURLParser;
import java.util.StringTokenizer;
import java.net.MalformedURLException;
//import com.imaginary.lwp.Identifier;
import com.activedatax.products.syndicator.content.OutputType;

import java.io.OutputStream;
import java.net.URLEncoder;
import java.io.FileOutputStream;
import java.io.IOException;
import java.util.List;
import java.rmi.RemoteException;
import java.util.Iterator;
import java.util.Date;
import java.util.Collection;
import java.util.StringTokenizer;
import java.util.Hashtable;
import java.sql.*;
import java.text.SimpleDateFormat;
import javax.servlet.http.HttpServletResponse;
import com.activedatax.utils.DigraphEncrypt;
import com.activedatax.utils.adxTools;

import gnu.regexp.*;
/*
 * This class is a helper class for the ADPExport servlet.
 */
class ADPExporter {

  // class variables/objects
  private Hashtable hItems;
  private Hashtable hItemContent;
  private Connection cnn;
  private String sServerRoot, sDocumentURL, sTargetURL, sAtomicQueryString, sIPAddress,
sItemTokens;
  private long lSerial, lSubId, lOfferContentSetId, lContentSetId, lItemId;
  private int nPos;
  private boolean bNewWindow, bShowDates;
  int nFullNum, nArcNum, nItemHashSize;

  ADPExporter(Connection pCnn, String psServerRoot, long plSerial, long plSubId, long plItemId,
              long plOfferContentSetId, String psDocumentURL, String psTargetURL,
              int pnFullNum, int pnArcNum, boolean pbNewWindow, boolean pbShowDates,
              String psIPAddress) {

    // init class variables/objects
    this.cnn = pCnn;
    this.lSerial = plSerial;
    this.lSubId = plSubId;
    this.lItemId = plItemId;
    this.sServerRoot = psServerRoot;
    this.lOfferContentSetId = plOfferContentSetId;
    this.lContentSetId = this.lOfferContentSetId;
    this.sDocumentURL = psDocumentURL;
```

```
      this.sTargetURL = psTargetURL;
      this.nFullNum = pnFullNum;
      this.nArcNum = pnArcNum;
      this.bNewWindow = pbNewWindow;
      this.bShowDates = pbShowDates;
      this.sIPAddress = psIPAddress;
      this.sAtomicQueryString = "";
      this.sItemTokens = "";
      this.nPos = -1;
    }

    public void setFullNum(int pnFullNum) {
      this.nFullNum = pnFullNum;
    }

    public void setArcNum(int pnArcNum) {
      this.nArcNum = pnArcNum;
    }

    public void setItemId(long plItemId) {
      this.lItemId = plItemId;
    }

    public void setOfferContentSetId(long plOfferContentSetId) {
      this.lOfferContentSetId = plOfferContentSetId;
    }

    public void setAtomicQueryString(String psItemIds, String psAtomicQueryString) {
      this.sAtomicQueryString = psAtomicQueryString;
      this.sItemTokens = psItemIds;
    }

    public void setAtomicPosition(int pnPos) {
      this.nPos = pnPos;
    }

    /**
    * This method will check to see if the web site making the content request is
    * authorized to receive the content.
    */
    public boolean validateADPRequest() {
      String sSQL = "";
      String sURL = parseHostFromURL(this.sDocumentURL);
      boolean bAuthorized = false;
      PreparedStatement stmt;
      ResultSet rs;

      //A non-subscriber is requesting the content.
      //The value in pOfferContentSetId refers to the "content_set_id" column of the content_set
  table.
      if((this.lSerial == -1) && (this.lSubId == -1)) {
        this.lContentSetId = this.lOfferContentSetId;
        sSQL = "SELECT DISTINCT url.url_id, url.crt_class FROM url, content_set "
             + "WHERE content_set.content_set_id = ? "
             + "AND UPPER(url.url) LIKE ? "
             + "AND url.url_id NOT IN (SELECT DISTINCT url_id FROM subscriber_url) "
             + "AND url.site_id = content_set.site_id ";
        try {
          stmt = cnn.prepareStatement(sSQL);
          stmt.clearParameters();
          stmt.setLong(1,this.lContentSetId);
          stmt.setString(2,"%" + sURL.toUpperCase() + "%");
          stmt.setMaxRows(1);
          rs = stmt.executeQuery();
          while(rs.next()) {
            bAuthorized = true;
          }
          rs.close();
          stmt.close();
        } catch(Exception e) {
          e.printStackTrace();
        }

      //A subscriber is requesting the content.
      } else {
        sSQL = "SELECT DISTINCT url.url_id, url.crt_class FROM url, offer_content_set, "
             + "subscription_subdetails, subscriber, subscriber_url "
             + "WHERE (offer_content_set.offer_content_set_id = ? "
             + "AND subscription_subdetails.serial_no = ? "
             + "AND subscriber.subscriber_id = ? "
             + "AND subscriber_url.subscriber_id = ? "
             + "AND url.url like ?) "
             + "AND offer_content_set.offer_id = subscription_subdetails.offer_id "
             + "AND subscription_subdetails.subscriber_id = subscriber.subscriber_id "
             + "AND subscriber.subscriber_id = subscriber_url.subscriber_id "
             + "AND subscriber_url.url_id = url.url_id";
        try {
          stmt = cnn.prepareStatement(sSQL);
          stmt.clearParameters();
          stmt.setLong(1,this.lOfferContentSetId);
          stmt.setLong(2,this.lSerial);
          stmt.setLong(3,this.lSubId);
          stmt.setLong(4,this.lSubId);
          stmt.setString(5,"%" + sURL.toUpperCase() + "%");
          stmt.setMaxRows(1);
          rs = stmt.executeQuery();
          while(rs.next()) {
            bAuthorized = true;
          }
          rs.close();
          stmt.close();
        } catch(Exception e) {
          e.printStackTrace();
        }
      }
      return bAuthorized;
    }

    /**
    * This method retrieves the requested content as defined by this classes' parameters.
    */
    private void getItemHashData() {
      this.nItemHashSize = Math.abs(this.nFullNum) + Math.abs(this.nArcNum);
      this.hItems = new Hashtable(this.nItemHashSize);
      this.hItemContent = new Hashtable(this.nItemHashSize);
      PreparedStatement stmt;
      ResultSet rs;
      String sSQL = "", sItemReview = "N", sItemIds = "";
      String[] sTemp = {"","","","","","","","","",""};
      long lThisItemId;
      int nAllowedArcNum = 0;
      int nFullCount = 0;
      int nResultCount = 0;


      if(!((this.lSerial == -1) && (this.lSubId == -1))) {  // A subscriber has requested the
content.
        //get the necessary content_set_id with an additional query
        sSQL = "SELECT offer_content_set.content_set_id, subdetails_cs.archives,
subdetails_cs.item_review "
             + "FROM offer_content_set, subdetails_cs "
             + "WHERE subdetails_cs.serial_no = ? "
             + "AND subdetails_cs.offer_content_set_id = ? "
             + "AND subdetails_cs.output_type_id = ? "
             + "AND subdetails_cs.offer_content_set_id = offer_content_set.offer_content_set_id";

        try {
          stmt = cnn.prepareStatement(sSQL);
          stmt.clearParameters();
          stmt.setLong(1,this.lSerial);
        stmt.setLong(2,this.lOfferContentSetId);
        stmt.setInt(3,OutputType.ADP);
        stmt.setMaxRows(1);
        rs = stmt.executeQuery();
        while(rs.next()) {
          this.lContentSetId = rs.getLong(1);
          nAllowedArcNum = rs.getInt(2);
          sItemReview = rs.getString(3);
        }
        rs.close();
        stmt.close();
      } catch(Exception e) {
        System.err.println("An ERROR ocurred in ADPExporter ...");
        e.printStackTrace();
        return;
      }

      //make sure the subscriber hasn't tried to request more archives than allowed
      if(nAllowedArcNum < this.nItemHashSize) this.nItemHashSize = nAllowedArcNum;
    }

    if(sItemReview.equals("Y")) {
      return;   //will need to code a block here when item_review feature is added
    }

    String sCsId = "AND item_content_set.content_set_id = ? ";
    if(this.lContentSetId == -1) sCsId = "AND item.item_id = ? ";

    //now get the content set items (not including the actual content column)
    sSQL = "SELECT item.item_id, item.title, item.subtitle, item.author, item.byline, "
         + "item.link_text, item.meta_data, item.comments, item.inctitle, item.last_updated_on "
         + "FROM item, item_content_set "
         + "WHERE UPPER(item.status) != ? AND item.timeup <= ? "
         + "AND item.timedown >= ? "
         + "AND item.item_id = item_content_set.item_id "
         + sCsId
         + "ORDER BY item.timeup DESC ";

    try {
      stmt = cnn.prepareStatement(sSQL);
      stmt.clearParameters();
      stmt.setString(1,"D");
      stmt.setTimestamp(2,new Timestamp((new Date()).getTime()));
      stmt.setTimestamp(3,new Timestamp((new Date()).getTime()));
      if(this.lContentSetId > -1)
        stmt.setLong(4,this.lContentSetId);
      else
        stmt.setLong(4,this.lItemId);
      stmt.setMaxRows(this.nItemHashSize);
      rs = stmt.executeQuery();
      while(rs.next()) {
        lThisItemId = rs.getLong(1);
//  System.out.println("FOUND ITEM ID: " + lThisItemId);
        if(this.nFullNum > nFullCount) {
          if(nFullCount > 0) sItemIds = sItemIds + ",";
          sItemIds = sItemIds + String.valueOf(lThisItemId);
          nFullCount++;
        }

        sTemp[0] = String.valueOf(lThisItemId);  //item_id
        sTemp[1] = rs.getString(2);  //title
        sTemp[2] = rs.getString(3);  //subtitle
        if(sTemp[2] == null) sTemp[2] = "";
        sTemp[3] = rs.getString(4);  //author
        if(sTemp[3] == null) sTemp[3] = "";
        sTemp[4] = rs.getString(5);  //byline
        if(sTemp[4] == null) sTemp[4] = "";
        sTemp[5] = rs.getString(6);  //linktext
        if(sTemp[5] == null) sTemp[5] = "";
        sTemp[6] = rs.getString(7);  //metadata
        if(sTemp[6] == null) sTemp[6] = "";
        sTemp[7] = rs.getString(8);  //comments
        if(sTemp[7] == null) sTemp[7] = "";
        sTemp[8] = rs.getString(9);  //inctitle
        sTemp[9] = rs.getTimestamp(10).toString();   //displaydate

        this.hItems.put(String.valueOf(nResultCount), sTemp.clone());
        nResultCount++;
      }
      rs.close();
      stmt.close();
    } catch(Exception e) {
      System.err.println("An ERROR ocurred in ADPExporter ...");
      e.printStackTrace();
    }

    //finally get nFullNum number of item "content" fields or a specific item
    if((sItemIds.length() > 0) || (this.lItemId > 0)) {
      if(this.lItemId > 0) {  //a specific item link was clicked on
        sSQL = "SELECT item_id, content FROM item WHERE item_id =" +
String.valueOf(this.lItemId);
      } else {
        sSQL = "SELECT item_id, content FROM item WHERE item_id IN(" + sItemIds + ")";
      }
      try {
        stmt = cnn.prepareStatement(sSQL);
        stmt.clearParameters();
        rs = stmt.executeQuery();
        while(rs.next()) {
          this.hItemContent.put(new Long(rs.getLong(1)), rs.getString(2));
        }
        rs.close();
        stmt.close();
      } catch(Exception e) {
        System.err.println("An ERROR ocurred in ADPExporter ...");
        e.printStackTrace();
      }

    }
  }

  public String getADPContent() {
    getItemHashData();
    String sURL = (this.sTargetURL.indexOf("?") == -1) ? "?" : "&";
    String sNewWindow = (this.bNewWindow) ? " TARGET=\"_new\"" : "";
    String sLink, sContent, sDisplayDate, sItemIdParameter;
    StringBuffer cb = new StringBuffer("");  //content buffer
    StringBuffer lb = new StringBuffer("");  //link buffer
    String[] sTemp;
    int nFull = this.hItemContent.size();
    int nItems = this.hItems.size();

    boolean bNegativeArcNum = (this.nArcNum < 0);

    //
j3serial,j3sub,j3ocset,j3durl,j3itemid,j3fullnum,j3arcnum,j3turl,j3newwindow,j3showdates,j3rand
    if(this.sAtomicQueryString.length() > 0) {
      sURL += "j3serial=" + URLEncoder.encode(String.valueOf(this.lSerial)) + "&j3sub=" +
URLEncoder.encode(String.valueOf(this.lSubId)) +
         this.sAtomicQueryString + "&j3newwindow=" +
URLEncoder.encode(String.valueOf(this.bNewWindow)) +
         "&j3showdates=" + URLEncoder.encode(String.valueOf(this.bShowDates));

    } else {
      sURL += "j3serial=" + URLEncoder.encode(String.valueOf(this.lSerial)) + "&j3sub=" +
URLEncoder.encode(String.valueOf(this.lSubId)) +
         "&j3ocset=" + URLEncoder.encode(String.valueOf(this.lOfferContentSetId)) + "&j3arcnum="
+
         URLEncoder.encode(String.valueOf(this.nArcNum)) + "&j3newwindow=" +
URLEncoder.encode(String.valueOf(this.bNewWindow)) +
        "&j3showdates=" + URLEncoder.encode(String.valueOf(this.bShowDates));
    }

    for (int i=0; i<nItems; i++) {
      sTemp = (String[])this.hItems.get(String.valueOf(i));
      sContent = (String)this.hItemContent.get(new Long(sTemp[0]));
      if(sContent != null) {
        sContent = replaceItemBinaryRefs(sContent);
        //sContent = adxTools.swapStrings(sContent,"\u00f3\u00f3",this.sServerRoot +
"com.activedatax.products.syndicator.export.ADPRetrieveItemBinary?binary_id=");
      } else {
        sContent = "";
      }
      sLink = (sTemp[5].trim().length() > 0) ? sTemp[5].trim() : sTemp[1].trim();
      sDisplayDate = sTemp[9];
      if(this.bShowDates || bNegativeArcNum) {
        sDisplayDate = sDisplayDate.substring(5,7) + "/" + sDisplayDate.substring(8,10) + "/" +
sDisplayDate.substring(2,4);
        sLink += " (" + sDisplayDate + ")";
      }

      //sTemp[0] = item_id
      //sTemp[1] = title
      //sTemp[2] = subtitle
      //sTemp[3] = author
      //sTemp[4] = byline
      //sTemp[5] = linktext
      //sTemp[6] = metadata
      //sTemp[7] = comments
      //sTemp[8] = inctitle
      //sTemp[9] = displaydate

      sItemIdParameter = sTemp[0];  //the current item_id
      if(this.sAtomicQueryString.length() > 0) {
        StringTokenizer tItems = new StringTokenizer(this.sItemTokens,":");
        if(this.nPos == 0) {
          sItemIdParameter = sTemp[0];
          tItems.nextToken();
        } else {
          sItemIdParameter = tItems.nextToken();
        }
        int nq = 1;
        while(tItems.hasMoreTokens()) {
          if(this.nPos == nq) {
            sItemIdParameter += ":" + sTemp[0];
            tItems.nextToken();
          } else {
            sItemIdParameter += ":" + tItems.nextToken();
          }
          nq++;
        }
      }

      if(sContent.length() > 0) {
        cb.append(sContent + "<P>");
        if(Math.abs(this.nArcNum) > 0)
          if((!this.bNewWindow) || ((this.bNewWindow) && (this.lItemId==0))) lb.append(sLink +
"<BR>");
      } else {
        if(Math.abs(this.nArcNum) > 0)
          if((!this.bNewWindow) || ((this.bNewWindow) && (this.lItemId==0))) lb.append("<A
HREF=\"" + this.sTargetURL + sURL + "&j3itemid=" + URLEncoder.encode(sItemIdParameter) + "\"" +
sNewWindow + ">" + sLink + "</A><BR>");
      }
    } // end for
    return parseContent(cb.toString() + "<P>" + lb.toString() + "<P>","");
  }

  private String replaceItemBinaryRefs(String psContent) {
    StringBuffer sb = new StringBuffer(psContent.length() + 300);
```

```
      String sId;
      int nPos = 0;
      int nLoc = psContent.indexOf("\u00f3\u00f3");
      while(nLoc != -1) {
        sb.append(psContent.substring(nPos,nLoc));
        sId = adxTools.convertStringToHexString(DigraphEncrypt.encryptDiGraph(this.sIPAddress +
"TFB" + psContent.substring(nLoc+2,nLoc+22)).trim());
        sb.append(this.sServerRoot +
"com.activedatax.products.syndicator.export.ADPRetrieveItemBinary?binary_id=" + sId);
        nPos = nLoc + 22;
        nLoc = psContent.indexOf("\u00f3\u00f3",nPos);
      }
      sb.append(psContent.substring(nPos));
      return sb.toString();
    }

    /**
    * This method will remove specified querystring parameters from a supplied URL
    * and return the resulting URL
    *
    * Example: For the method parameters
    * psURL = "http://www.mysite.com/page.asp?param1=x&param2=y&param3=z"
    * psQueryStringParams = "param1,param3"
    *
    * The returned URL will be:
    * "http://www.mysite.com/page.asp?param2=y"
    */

    public static String removeParamsFromURL(String psURL, String psQueryStringParams) {
      //System.out.println(URL);
      String sTempURL = psURL;
      StringTokenizer tokenizer = new StringTokenizer(psQueryStringParams,",");
      adxURLParser myParser = new adxURLParser();
      try {
        while(tokenizer.hasMoreTokens()) {
          myParser.setOriginalURL(sTempURL);
          myParser.setParamToRemove(tokenizer.nextToken());
          sTempURL = myParser.getRemovedParamURL();
        }
      } catch (MalformedURLException mue) {
        mue.printStackTrace();
        //return an error string that will need to be handled by the calling method.
        sTempURL = "error";
      }
      return sTempURL;
    }


    /**
    * This method will parse out and return the host/domain name from a supplied URL
    *
    * Example: For the URL:
    * psURL = "http://www.mysite.com/page.asp?param1=x&param2=y&param3=z"
    *
    * The returned String will be:
    * "www.mysite.com"
    */

    public static String parseHostFromURL(String psURL) {
      StringTokenizer tokenizer = new StringTokenizer(psURL, "/");
      int tokencount = tokenizer.countTokens();
      int i;
      String sReturnHost = "";
      try {
        if (tokencount > 1) {
          for (i = 1; i < 3; i++) sReturnHost = tokenizer.nextToken();
        } else {
          sReturnHost = "error";
        }
      } catch(Exception e) {
```

```
      //return an error string that will need to be handled by the calling method.
      sReturnHost = "error";
    }
    return sReturnHost;
  }

  public static int indexOfIgnoreCase(String sTempText, String sSubString, int nStartAt) {
    return sTempText.toLowerCase().indexOf( sSubString.toLowerCase(), nStartAt);
  }

  /*
  public static String swapStrings(String sTextIn, String sOldString, String sNewString) {
    int nOldStringStartAt;
    int nOldStringLength = sOldString.length();
    int nNewStringLength = sNewString.length();
    String sTempText = sTextIn;
    nOldStringStartAt = indexOfIgnoreCase(sTempText, sOldString, 0);
    while (nOldStringStartAt != -1) {
      sTempText = sTempText.substring( 0, nOldStringStartAt) + sNewString +
sTempText.substring(nOldStringStartAt + nOldStringLength);
      nOldStringStartAt = indexOfIgnoreCase(sTempText, sOldString, nOldStringStartAt +
nNewStringLength);
    }
    return sTempText;
  }
  */

  public static String parseContent(String sContent, String sServerRoot) {
    String sClientScripts = "";

    int nStartSearchAt = 0;
    int nScriptLoc = indexOfIgnoreCase(sContent,"<SCRIPT",nStartSearchAt);
    if(nScriptLoc > -1) {  //Check for client scripts and separate them from regular HTML
      try {
        int nEndScriptLoc;
        int nArticleLength = sContent.length();
        StringBuffer sbArticle = new StringBuffer(nArticleLength + 1);
        StringBuffer sbScripts = new StringBuffer();
        while(nScriptLoc > -1) {
          nEndScriptLoc = indexOfIgnoreCase(sContent,"</SCRIPT>",nScriptLoc);
          sbArticle.append(sContent.substring(nStartSearchAt,nScriptLoc));

sbScripts.append(sContent.substring((indexOfIgnoreCase(sContent,">",nScriptLoc)+1),nEndScriptLoc)
);
          sbScripts.append('\n');
          sbScripts.append('\r');
          //System.out.println("The HTML: " + sContent.substring(nStartSearchAt,nScriptLoc));
          //System.out.println("The Script: " +
sContent.substring((indexOfIgnoreCase(sContent,">",nScriptLoc)+1),nEndScriptLoc));

          nStartSearchAt = nEndScriptLoc + 9;
          nScriptLoc = indexOfIgnoreCase(sContent,"<SCRIPT",nStartSearchAt);
        }
        //sbArticle.append(sContent.substring(nStartSearchAt,nArticleLength - 1));
        sbArticle.append(sContent.substring(nStartSearchAt,nArticleLength));  //changed by JW
        //System.out.println(sbArticle.toString());
        //System.out.println(sbScripts.toString());
        sClientScripts = sbScripts.toString();   //contains just the scripts' code
        sContent = sbArticle.toString();    //contains just the article HTML
      }
      catch(Exception e) {
        System.err.println(e.getMessage());
        e.printStackTrace();
      }
    }

    sContent = sContent.replace('\r', ' ');
    sContent = sContent.replace('\n', ' ');
    try {
      sContent = adxTools.swapStrings(sContent,"\\","\\\\");
      sContent = adxTools.swapStrings(sContent,"\'","\\\'");
      sContent = adxTools.swapStrings(sContent,"\"","\\\"");
    }
    catch(Exception e) {
        System.err.println(e.getMessage());
        e.printStackTrace();
    }

    return sClientScripts + " document.write ('"  + sContent + "'); " + '\r';
  }


} // end class ADPExporter
```

active data exchange™

YOUR CONTENT. ANY PLACE. ANY TIME.

ACTIVE DATA RANDOMIZER User Guide

Active Data Randomizer gives Users the power to keep a Website fresh and inviting to visitors. This convenient, easy-to-use tool facilitates the collecting, grouping, modifying and removal of messages, either graphic or text, that are displayed within a page each a time it is loaded, reloaded or refreshed by the viewer.

This User Guide is an overview of how Active Data Randomizer works and what it does. For a complete demonstration, contact you Active Data Exchange representative.

active data exchange

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Active Data Randomizer

Overview

A practical tool, Active Data Randomizer gives Users the power to keep their Website viewers attentive to the screen by changing a specific part of a page message each time a viewer refreshes or returns to a previously viewed screen. An easy to use tool that requires no additional hardware or installation, Active Data Randomizer is platform independent and facilitates the grouping and presenting of graphic or text messages on a Website page.

The Active Data Randomizer allows for direct, targeted message updates, without the complexities of publishing completely new pages or documents, from any location with Internet access, at any time. Short, catchy visuals and text can be displayed on a page with little effort on the part of the client after setup is complete. The random display of messages keeps your page continually altering and fresh to viewers as they browse through a site. Using Active Data Randomizer to rotate images or messages will decrease the static look and feel of a Web page.

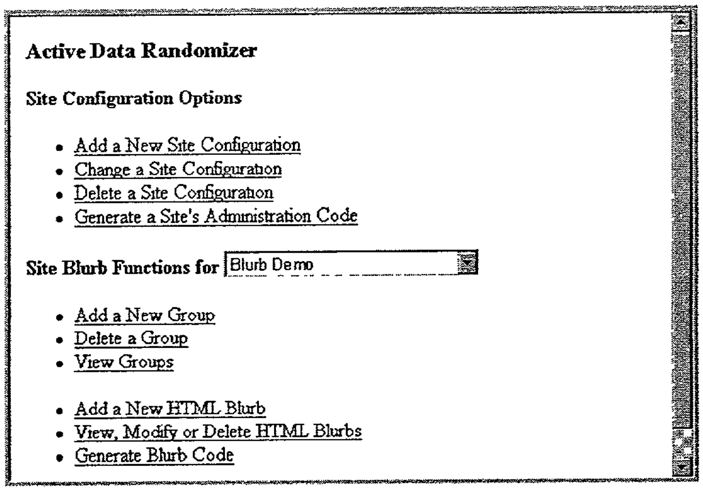
Step-by-step guide for Active Data Randomizer

Getting Started

The Active Data Randomizer is accessible through a Universal Resource Locator, URL. Open your Internet browser and enter this URL into the proper area:

http://publisher3.activedatax.com/servlet/com.activedatax.products.Blurb.AdminMenu

You will be taken to the main screen for Active Data Randomizer.



Active Data Randomizer

Site Configuration Options

- Add a New Site Configuration
- Change a Site Configuration
- Delete a Site Configuration
- Generate a Site's Administration Code

Site Blurb Functions for Blurb Demo

- Add a New Group
- Delete a Group
- View Groups

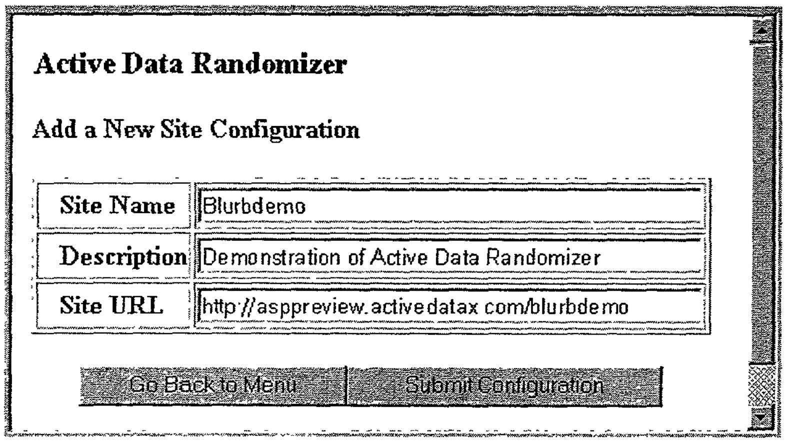
- Add a New HTML Blurb
- View, Modify or Delete HTML Blurbs
- Generate Blurb Code

Figure 1 Site Configuration Screen

The main screen for the Active Data Randomizer has links to each and every functionality offered by this time-saving tool. Once you have accessed the Active Data Randomizer tool, you will see all the site configuration options and functions that are usable for screen refresh messages. Click on any of the bulleted items to access that functionality.

Step 1 Site Set Up

You will arrive at this window when Add a New Site Configuration is chosen from the Site Configuration Screen. From here you are able to set up a new location to display Active Data Randomizer messages or return to the Menu.


Active Data Randomizer

Add a New Site Configuration

Site Name	Blurbdemo
Description	Demonstration of Active Data Randomizer
Site URL	http://asppreview.activedatax com/blurbdemo

Figure 2 Add a New Site Configuration

To Set up a new site

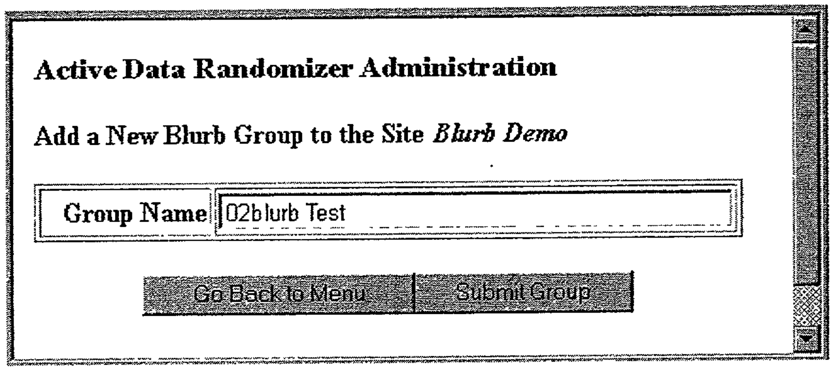
1. Site Name—enter your new site name.
2. Descriptions—enter a brief explanation.
3. Enter the URL to locate the site and the page where you want your dynamic blurbs to be displayed
4. Select the Submit Configuration button

The new site is automatically configured, and you will be returned to the Administration screen.

NOTE—the success of your new site set-up is confirmed and expressed by the red text in the upper portion of the screen.

Step 2 Randomizer Groups

You will arrive at this window when Add a New Group is chosen from the Site Configuration screen. From here you are able to set up a new group of Active Data Randomizer blurbs or return to the Menu.



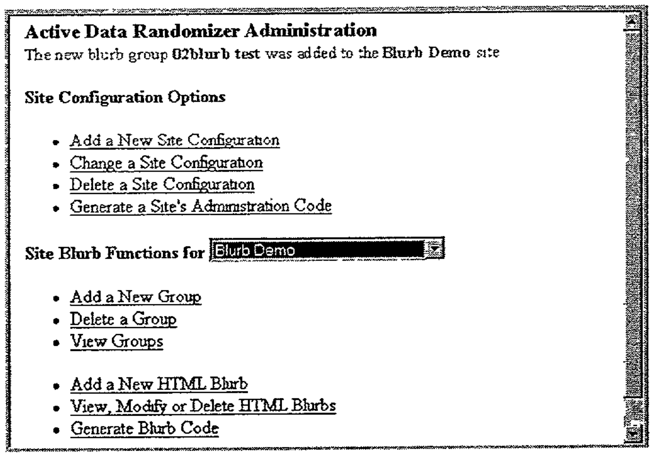
Active Data Randomizer Administration

Add a New Blurb Group to the Site *Blurb Demo*

Group Name: 02blurb Test

Figure 3 Add a New Group Name

1. Enter a Group Name for your first collection of different blurbs that will be used for a specific location. These are the dynamic blurbs that will be rotated sequentially every time a viewer returns to that page and it is reloaded, or when the viewer selects the refresh icon. The blurbs you want to set up are virtually limitless and can be graphic or textual based. The sample group name in this case is 02blurb test.
2. Click **Submit Group.**



Active Data Randomizer Administration
The new blurb group 02blurb test was added to the Blurb Demo site

Site Configuration Options

- Add a New Site Configuration
- Change a Site Configuration
- Delete a Site Configuration
- Generate a Site's Administration Code

Site Blurb Functions for Blurb Demo

- Add a New Group
- Delete a Group
- View Groups

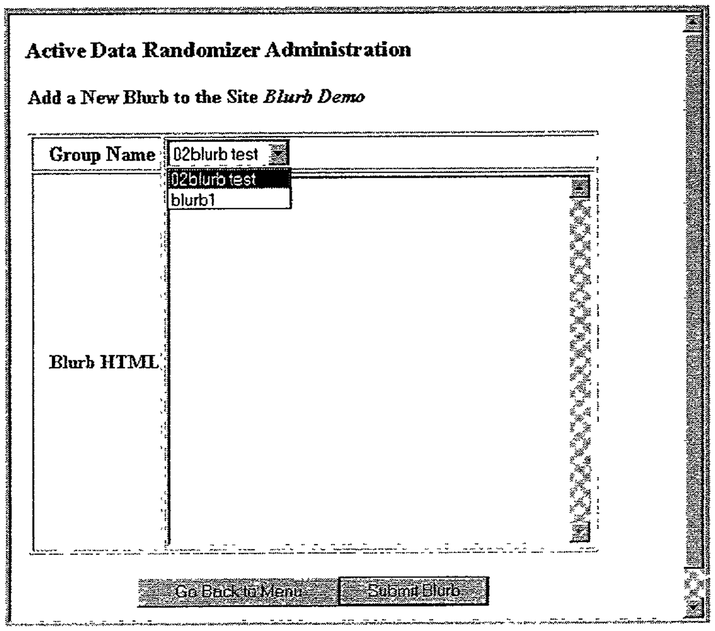
- Add a New HTML Blurb
- View, Modify or Delete HTML Blurbs
- Generate Blurb Code

Figure 4 New Group Confirmation Message

3. You will be returned to the main menu. A confirmation that your group has been created is shown in red text. It repeats the Group Name and the Site Name that it has been added to.
4. To continue click on **Add a New HTML Blurb**, located in the lower group of bulleted items.

Step 3 HTML Blurbs

You will arrive at this window when Add a New HTML Blurb is chosen from the New Group Confirmation screen. From here you are able to set up a new location to display Active Data Randomizer messages or return to the Menu.

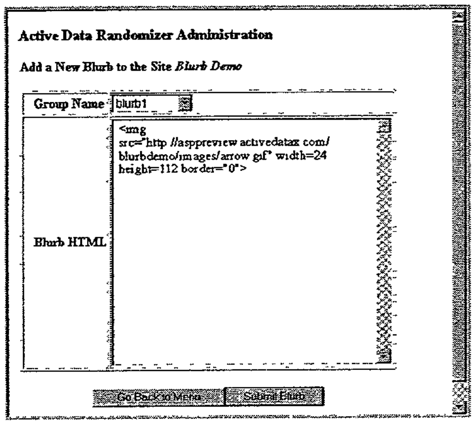

Active Data Randomizer Administration

Add a New Blurb to the Site *Blurb Demo*

Group Name	02blurb test
Blurb HTML	

Figure 5 New Active Data Randomizer Blurb Group

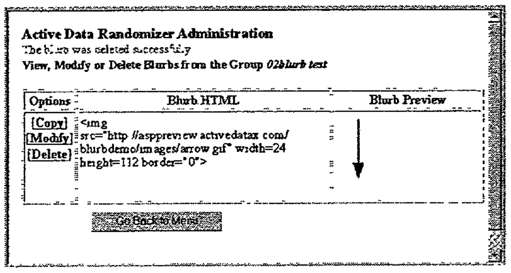
1. From the Add a New randomizer screen, select the Group Name from the pull down menu you want this new HTML blurb added to.
2. Enter or Copy and Paste the HTML code for the picture or text or both that you want to show in the refreshed window. This information is retrieved from your original document's source code from whatever HTML editor program you are using.



Active Data Randomizer Administration

Add a New Blurb to the Site *Blurb Demo*

Group Name	blurb1
Blurb HTML	<img src="http //asppreview activedatax com/ blurbdemo/images/arrow gif" width=24 height=112 border="0">



Active Data Randomizer Administration

The blurb was deleted successfully

View, Modify or Delete Blurbs from the Group *02blurb test*

Options	Blurb HTML	Blurb Preview
[Copy] [Modify] [Delete]	<img src="http //asppreview activedatax com/ blurbdemo/images/arrow gif" width=24 height=112 border="0">	

Figure 6 New Active Data Randomizer Blurb HTML Confirmation

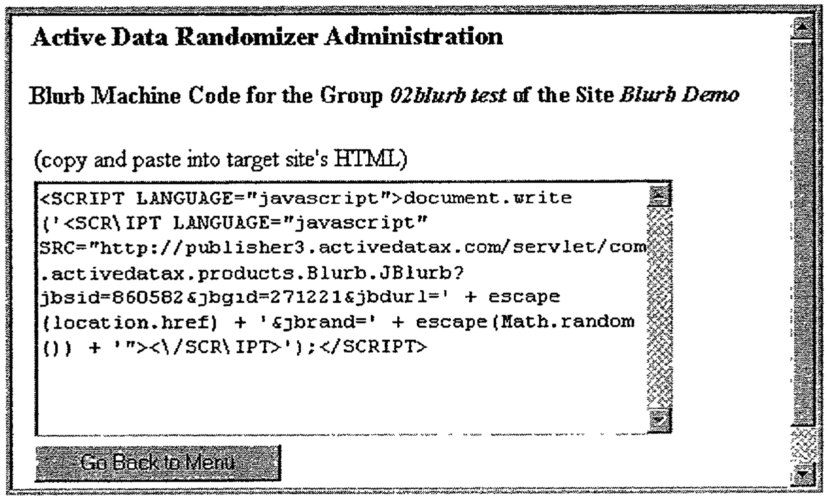
3. Click on **Submit Blurb**. A confirmation screen will show that the blurb has been added. You are still able to modify or delete your blurb in the future if necessary. Any action you take at this step will be confirmed within the next window in red text.

To add another HTML blurb:

1. Click on [Copy] and Randomizer will automatically duplicate your last HTML blurb.
2. Either insert new HTML text or alter your HTML text, as in the case of changing the image only, you can just update the name of the source image, without having to re-enter all new HTML.
3. Select the **Submit Blurb** button after each entry to save the changes
   Each entry will be confirmed and added to your list of HTML blurbs.
4. Repeat this process until you have added all your HTML blurbs.
5. Select **Go Back to Menu.**

Step 4 Java Script Code

Once you have returned to the Site Configuration main screen,
1. Select Generate Blurb Code from the lower level bulleted options.
2. Active Data Blurb Admin will automatically write the Java Script needed to instruct your site to sequentially rotate the HTML sources. This Java will include all necessary instructions to refresh the image in the window each time it is reloaded or manually refreshed.



Active Data Randomizer Administration

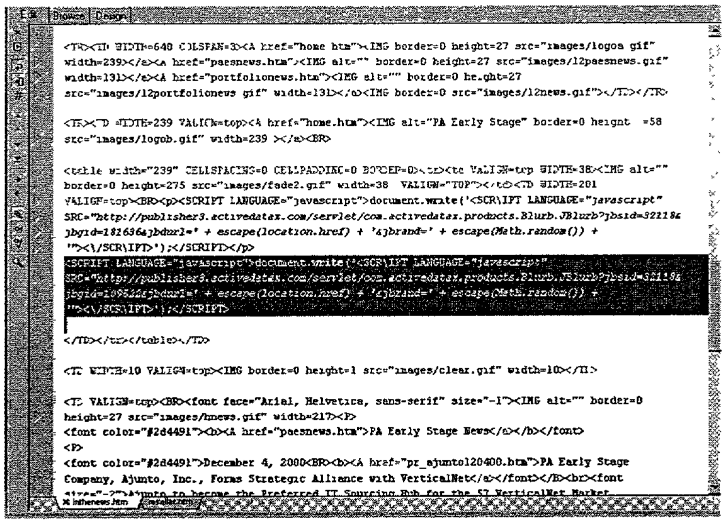
Blurb Machine Code for the Group *02blurb test* of the Site *Blurb Demo*

(copy and paste into target site's HTML)

```
<SCRIPT LANGUAGE="javascript">document.write
('<SCR\IPT LANGUAGE="javascript"
SRC="http://publisher3.activedatax.com/servlet/com
.activedatax.products.Blurb.JBlurb?
jbsid=860582&jbgid=271221&jbdurl=' + escape
(location.href) + '&jbrand=' + escape(Math.random
()) + '"><\/SCR\IPT>');</SCRIPT>
```

Figure 7 Active Data Randomizer Blurb Code

3. Highlight and copy this Java Script
4. Return to your primary source document using your HTML Editing program and select the HTML source view.



```
<TR><TD WIDTH=640 COLSPAN=3><A href="home htm"><IMG border=0 height=27 src="images/logoa gif"
width=239></a><A href="paesnews.htm"><IMG alt="" border=0 height=27 src="images/12paesnews.gif"
width=131></a><A href="portfolionews.htm"><IMG alt="" border=0 height=27
src="images/12portfolionews gif" width=131></a><IMG border=0 src="images/12news.gif"></TD></TR>

<TR><TD WIDTH=239 VALIGN=top><A href="home.htm"><IMG alt="PA Early Stage" border=0 height  =58
src="images/logob.gif" width=239 ></a><BR>

<table width="239" CELLSPACING=0 CELLPADDING=0 BORDER=0><tr><td VALIGN=top WIDTH=38><IMG alt=""
border=0 height=275 src="images/fade2.gif" width=38  VALIGN="TOP"></td><TD WIDTH=201
VALIGN=top><BR><p><SCRIPT LANGUAGE="javascript">document.write('<SCR\IPT LANGUAGE="javascript"
SRC="http://publisher3.activedatax.com/servlet/com.activedatax.products.Blurb.JBlurb?jbsid=32118&
jbgid=181636&jbdurl=' + escape(location.href) + '&jbrand=' + escape(Math.random()) +
'"><\/SCR\IPT>');</SCRIPT></p>
<SCRIPT LANGUAGE="javascript">document.write('<SCR\IPT LANGUAGE="javascript"
SRC="http://publisher3.activedatax.com/servlet/com.activedatax.products.Blurb.JBlurb?jbsid=32118&
jbgid=109522&jbdurl=' + escape(location.href) + '&jbrand=' + escape(Math.random()) +
'"><\/SCR\IPT>');</SCRIPT>

</TD></tr></table></TD>

<TD WIDTH=10 VALIGN=top><IMG border=0 height=1 src="images/clear.gif" width=10></TD>

<TD VALIGN=top><BR><font face="Arial, Helvetica, sans-serif" size="-1"><IMG alt="" border=0
height=27 src="images/hnews.gif" width=217><P>
<font color="#2d4491"><b><A href="paesnews.htm">PA Early Stage News</a></b></font>
<P>
<font color="#2d4491">December 4, 2000<BR><b><A href="pr_ajunto120400.htm">PA Early Stage
Company, Ajunto, Inc., Forms Strategic Alliance with VerticalNet</a></font></B><br><font
size="-2">Ajunto to become the Preferred IT Sourcing Hub for the 57 VerticalNet Market
```

Figure 8 Sample HTML Editor

5. Paste the Active Data Randomizer Java script you have copied into your original source document for the Web page.

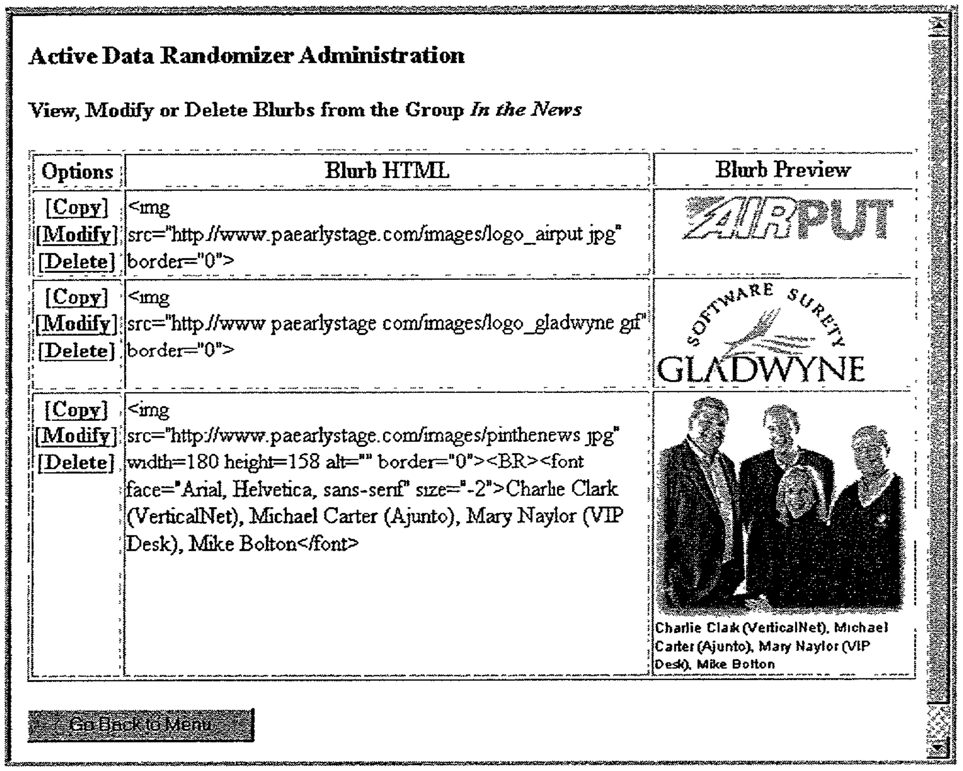
NOTE—Make sure you are within the proper location on your Web page. Paste the script in the exact position where you want the message to be displayed on the page.

6. Exit (or close) your HTML editing program and return to the Active Data Randomizer Administration screen.
7. Click the **Return to Menu** button.

Step 5 Verify or Modify Blurb Groupings

From the main Active Data Randomizer Administration window, you may view your group of messages. Active Data Randomizer presents both the HTML and a visual of the output.

1. Choose the View, Modify, Delete HTML Blurb to view and confirm your message or messages.



Active Data Randomizer Administration

View, Modify or Delete Blurbs from the Group *In the News*

Options	Blurb HTML	Blurb Preview
[Copy] [Modify] [Delete]	<img src="http://www.paearlystage.com/images/logo_airput.jpg" border="0">	
[Copy] [Modify] [Delete]	<img src="http://www.paearlystage.com/images/logo_gladwyne.gif" border="0">	
[Copy] [Modify] [Delete]	<img src="http://www.paearlystage.com/images/pinthenews.jpg" width=180 height=158 alt="" border="0"><BR><font face="Arial, Helvetica, sans-serif" size="-2">Charlie Clark (VerticalNet), Michael Carter (Ajunto), Mary Naylor (VIP Desk), Mike Bolton</font>	Charlie Clark (VerticalNet), Michael Carter (Ajunto), Mary Naylor (VIP Desk), Mike Bolton

Figure 9 Confirmation and View Message Window

2. A preview image of the actual image that will be shown on a viewer's screen. Select **Go Back to Menu** to pretest the messages.

Step 6 Rotating Blurbs for Preview

It is best to always pretest the site to make sure your messages are being presented properly.

1. Open any separate browser window and point to the page you want to check.
2. Choose *refresh* to view the new message in the Group you have been assigned to that page. Continue to choose refresh or move to another page and return to the original page to verify that your messages have changed. At times it is normal for Active Data Randomizer to repeat a message or image.
3. Exit

Step 7 Exit

Users may exit Active Data Randomizer Administration by simply leaving or closing your browser window.

About Active Data Exchange

Active Data Exchange is a leader in syndication software solutions that empower companies to get the right content to the right place at the right time. Active Data Exchange helps create highly effective information delivery chains with partners, customers, vendors, distributors, investors, and other target groups and affects commerce with communications tools better than existing email technologies. The company is active in several industry standards committees including the Information and Content Exchange Authoring Group and the W3C XML Protocol Standards Committee. Clients include Crown, Cork and Seal, MainStreet Networks, Turner Construction, Penn Mutual Life Insurance, DeSales and Lehigh University.

Appendix E

```
/**
 * Title:        Active Data Blurb Machine<p>
 * Description:  Dynamic HTML content generation without the need for a client install.<p>
 * Copyright:    Copyright (c) John E. Wetzel<p>
 * Company:      Active Data Exchange, Inc.<p>
 * @author:      John E. Wetzel
 * @version:     1.0a
 */


package com.activedatax.products.Blurb;

import javax.servlet.*;
import javax.servlet.http.*;
import com.activedatax.products.Blurb.dbmodules.*;
import com.activedatax.products.Blurb.html.*;
import com.activedatax.sql.HttpServletDb;
import com.activedatax.utils.HTMLQuoter;
import java.io.*;
import java.net.*;
import java.util.*;
import java.sql.*;
import gnu.regexp.*;
import java.net.URL;

public class AdminMenu extends HttpServletDb {
  private BlurbCommon mycommon;
  private String server = "" ;
  private String dbname = "" ;
  private String thisServlet = "";
  private String serverRoot = "";
  private String fLink = "";
  private String fPost = "";

  //Initialize global variables
  public void init(ServletConfig config) throws ServletException {
    super.init(config);

    //USE BlurbCommon.class TO GET PROPERTIES -- SERVER & DATABASE NAME
    mycommon = new BlurbCommon();
    Properties p = mycommon.getProps();
    serverRoot = p.getProperty("server.root");
    server = p.getProperty ("default.server");
    dbname = p.getProperty ("default.dbname");

    //store the alias in
    p = mycommon.getAliases();
    thisServlet = p.getProperty("AdminMenu");

    fLink = serverRoot + thisServlet;
    fPost = serverRoot + thisServlet;
  }

  public void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String outputHTML = doBlurb(request, response, this.fLink, this.fPost, false);
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    //System.out.println(request.getParameter("jbact"));
    out.println(outputHTML);
    return;
  }

  public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String outputHTML = doBlurb(request, response, this.fLink, this.fPost, false);
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    out.println(outputHTML);
    return;
  }

  public String doBlurb(HttpServletRequest request, HttpServletResponse response, String
forwardLink, String forwardPost, boolean syndicated) throws ServletException, IOException {
    int jbsid, jbgid, jbbid;
    String outputHTML = "";
    String param = "";
    String action = request.getParameter("jbact");

    try {
      jbsid = Integer.parseInt(request.getParameter("jbsid").trim());
    } catch(Exception e) { jbsid = -1; }

    try {
      jbgid = Integer.parseInt(request.getParameter("jbgid").trim());
    } catch(Exception e) { jbgid = -1; }

    try {
      jbbid = Integer.parseInt(request.getParameter("jbbid").trim());
    } catch(Exception e) { jbbid = -1; }

    if(jbsid == -1) {  //get the blurb_site_id of the first site in the drop-down list box
      jbsid = getFirstSiteId();
    }

    if ((action == null) || (action.length() == 0)) {
      outputHTML =
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"",syndicat
ed);
    }
    else {
      if (action.equalsIgnoreCase("add")) {
        outputHTML = AdminMenuHTML.siteAddOrModify(forwardLink,-1,"","","http://","");
      } else if (action.equalsIgnoreCase("addpost")) {
        outputHTML = doSiteAdd(request, response, syndicated);
      } else if (action.equalsIgnoreCase("getpostdata")) {
        outputHTML =
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"",syndicat
ed);
      } else if (action.equalsIgnoreCase("addbg")) {
        outputHTML =
AdminMenuHTML.groupAdd(jbsid,-1,forwardLink,forwardPost,"",getSiteNameFromId(jbsid),"");
      } else if (action.equalsIgnoreCase("addbgpost")) {
        outputHTML = doGroupAdd(request,response,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("addbb")) {
        outputHTML = addBlurb(jbsid,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("copybb")) {
        outputHTML = copyBlurb(jbsid,jbgid,jbbid,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("chgbb")) {
        outputHTML = changeBlurb(jbsid,jbgid,jbbid,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("chgbbpost2")) {
        outputHTML = doBlurbChange(request,response,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("addbbpost")) {
        outputHTML = doBlurbAdd(request,response,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("chg")) {
        outputHTML = changeSiteSelect(syndicated);
      } else if (action.equalsIgnoreCase("gensitecode")) {
        outputHTML = genSiteCodeSelect(syndicated);
      } else if (action.equalsIgnoreCase("gensitecodepost1")) {
        outputHTML =
AdminMenuHTML.generateSiteAdminCode(jbsid,forwardLink,this.serverRoot,getSiteNameFromId(jbsid));
      } else if (action.equalsIgnoreCase("chgpost1")) {
        outputHTML = changeSiteDetails(request, response, syndicated);
      } else if (action.equalsIgnoreCase("chgpost2")) {
        outputHTML = doSiteChange(request, response, syndicated);
      } else if (action.equalsIgnoreCase("del")) {
        outputHTML = deleteSiteSelect(syndicated);

      } else if (action.equalsIgnoreCase("delbg")) {
        outputHTML = deleteGroupSelect(jbsid,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("delbb")) {
        outputHTML = viewGroupBlurbs(jbsid,jbgid,jbbid,forwardLink,forwardPost,"Are you
<B>sure</B> you want to delete the blurb shown?", syndicated);
      } else if (action.equalsIgnoreCase("viewbb")) {
        outputHTML = viewBlurbSelect(jbsid,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("viewbbpost1")) {
        outputHTML = viewGroupBlurbs(jbsid,jbgid,-1,forwardLink,forwardPost,"",syndicated);
      } else if (action.equalsIgnoreCase("delbgpost1")) {
        outputHTML =
deleteGroupDetails(jbsid,forwardLink,forwardPost,request,response,syndicated);
      } else if (action.equalsIgnoreCase("delbgpost2")) {
        outputHTML = doGroupDelete(jbsid,forwardLink,forwardPost,request,response,syndicated);
      } else if (action.equalsIgnoreCase("delbbpost1")) {
        outputHTML = doBlurbDelete(jbsid,jbgid,jbbid,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("delpost1")) {
        outputHTML = deleteSiteDetails(request, response, syndicated);
      } else if (action.equalsIgnoreCase("delpost2")) {
        outputHTML = doSiteDelete(request, response, syndicated);
      } else if (action.equalsIgnoreCase("genbcode")) {
        outputHTML = generateBlurbCode(jbsid,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("viewbg")) {
        outputHTML = viewGroups(jbsid,forwardLink,forwardPost,syndicated);
      } else if (action.equalsIgnoreCase("genbcodepost1")) {
        outputHTML =
AdminMenuHTML.generateBlurbCode(jbsid,jbgid,forwardLink,this.serverRoot,getSiteNameFromId(jbsid),
getGroupNameFromId(jbgid));
      }
    }

    return outputHTML;
  }

  private synchronized String doSiteAdd(HttpServletRequest request, HttpServletResponse
response, boolean syndicated) {
    boolean errFlag = false;
    int id = 0;
    int count = 1;
    double tempval;
    Connection conn;
    Vector rs = null;
    BlurbSiteDB bs = new BlurbSiteDB();
    String blurb_site_name = request.getParameter("blurb_site_name").trim();
    String description = request.getParameter("description").trim();
    String url = request.getParameter("url").trim();

    /*
    Test if site, desc, and http:// are valid
    */
    try {
      if (blurb_site_name.trim().equalsIgnoreCase("")) {
        return AdminMenuHTML.siteAddOrModify(this.serverRoot + this.thisServlet, -1,
blurb_site_name, description, url, "An error occured. An invalid <B>Site Name or Site
Description</B> was entered.") ;
      }
      if (description.trim().equalsIgnoreCase("")) {
        return AdminMenuHTML.siteAddOrModify(this.serverRoot + this.thisServlet, -1,
blurb_site_name, description, url, "An error occured. An invalid <B>Site Name or Site
Description</B> was entered.") ;
      }
    }
    catch(Exception e) {
      BlurbCommon.handleException(e);
      return AdminMenuHTML.siteAddOrModify(this.serverRoot + this.thisServlet, -1,
blurb_site_name, description, url, "An error occured. An invalid <B>Site Name or Site
Description</B> was entered.") ;
    }

    /*
    Test for a valid URL
    */
```

```
      if (url.length() > 9) {
        if (url.substring(0,7).equalsIgnoreCase("http://")) {
        } else if(url.substring(0,8).equalsIgnoreCase("https://")) {
        } else {
          return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,-1,blurb_site_name,description,url,"An error occurred.  An invalid <B>Site
URL</B> was entered.");
        }
      } else {
        return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,-1,blurb_site_name,description,url,"An error occurred.  An invalid <B>Site
URL</B> was entered.");
      }
      if (!url.substring(0,5).equalsIgnoreCase("https")) {
        try {
          URL testURL = new URL(url);
        }
        catch(Exception e) {
          BlurbCommon.handleException(e);
          return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,-1,blurb_site_name,description,url,"An error occurred.  An invalid <B>Site
URL</B> was entered.");
        }
      }


      /*
      Pick a random id for blurb_site and make sure that a record with
      that id doesn't already exist.
      */
      conn = dataConnMan.getConnection(server, dbname);
      while (count > 0) {
        tempval = Math.floor(1000000 * Math.random()) ;
        id = (int)tempval;
        try {
          rs = bs.getAll(conn, "blurb_site_id = " + id);
        } catch(Exception e) {
          BlurbCommon.handleException(e);
          break;
        }
        count = rs.size();
      }
      dataConnMan.freeConnection(server, dbname, conn);
      if (count > 0)
        return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated),"An error occurred.  The new site
configuration was not added.",syndicated);

      /*
      Make sure that blurb_site_name doesn't already exist in the database.
      */
      conn = dataConnMan.getConnection(server, dbname);
      try {
        //blurb_site_name = new RE("'").substituteAll(blurb_site_name, "''");
        rs = bs.getAll(conn, "blurb_site_name = '" + new RE("'").substituteAll(blurb_site_name,
"''") + "'");
      } catch(Exception e) {
        BlurbCommon.handleException(e);
        errFlag = true;
      }
      dataConnMan.freeConnection(server, dbname, conn);

      if(rs.size() > 0)
        return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,-1,blurb_site_name,description,url,"The site <B>" + blurb_site_name + "</B>
already exists.  Please try again.");
      if(errFlag)
        return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated),"An error occurred.  The new site
configuration was not added.",syndicated);
```

```
    //attempt to do the database insert of the new blurb_site record;
    bs.blurb_site_id = id;
    bs.blurb_site_name = blurb_site_name;
    bs.description = description;
    bs.url = url;
    bs.status = "Y";
    bs.created_on = new java.util.Date();
    bs.last_modified_on = new java.util.Date();

    conn = dataConnMan.getConnection(server, dbname);
    try {
      bs.insert(conn);
    } catch (Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated),"An error occurred.  The new site
configuration was not added.",syndicated);
    else
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated),"The new site configuration for <B>" +
blurb_site_name + "</B> was added successfully.",syndicated);
  }

  private synchronized String doGroupAdd(HttpServletRequest request, HttpServletResponse
response, String forwardLink, String forwardPost, boolean syndicated) {
    boolean errFlag = false;
    int id = 0;
    int count = 1;
    double tempval;
    Connection conn;
    Vector rs = null;
    BlurbGroupDB bg = new BlurbGroupDB();
    int jbsid = Integer.parseInt(request.getParameter("jbsid").trim());
    String blurb_group_name = request.getParameter("blurb_group_name").trim();
    //String description = request.getParameter("description").trim();

    if (blurb_group_name == null) {
      return
AdminMenuHTML.groupAdd(jbsid,-1,forwardLink,forwardPost,blurb_group_name,getSiteSelectList(jbsid,
 false, syndicated),"An Invalid blurb group name.  Please try again.");
    } else if (blurb_group_name.trim().equalsIgnoreCase("")) {
      return
AdminMenuHTML.groupAdd(jbsid,-1,forwardLink,forwardPost,blurb_group_name,getSiteSelectList(jbsid,
 false, syndicated),"An Invalid blurb group name.  Please try again.");
    }

    /*
    Pick a random id for blurb_group and make sure that a record with
    that id doesn't already exist.
    */
    conn = dataConnMan.getConnection(server, dbname);
    while (count > 0) {
      tempval = Math.floor(1000000 * Math.random()) ;
      id = (int)tempval;
      try {
        rs = bg.getAll(conn, "blurb_group_id = " + id);
      } catch(Exception e) {
        BlurbCommon.handleException(e);
        break;
      }
      count = rs.size();
    }
    dataConnMan.freeConnection(server, dbname, conn);
    if (count > 0)
```

```
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(getFirstSiteId(),true,syndicated),
"An error occurred.  The new blurb group was not added.",syndicated);

    /*
    Make sure that blurb_group_name doesn't already exist in the database.
    */
    conn = dataConnMan.getConnection(server, dbname);
    try {
      rs = bg.getAll(conn, "blurb_group_name = '" + new RE("'").substituteAll(blurb_group_name,
"''") + "'");
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(rs.size() > 0)
      return
AdminMenuHTML.groupAdd(jbsid,-1,forwardLink,forwardPost,blurb_group_name,getSiteSelectList(jbsid,
 false, syndicated),"The group <B>" + blurb_group_name + "</B> already exists.  Please try
again.");
    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred.  The new blurb group was not added.",syndicated);

    //attempt to do the database insert of the new blurb_group record;
    bg.blurb_site_id = jbsid;
    bg.blurb_group_id = id;
    bg.blurb_group_name = blurb_group_name;
    //bg.description = description;
    bg.status = "Y";
    bg.created_on = new java.util.Date();
    bg.last_modified_on = new java.util.Date();

    conn = dataConnMan.getConnection(server, dbname);
    try {
      bg.insert(conn);
    } catch (Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "An error
occurred.  The new blurb group was not added.",syndicated);
    else
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "The new
blurb group <B>" + blurb_group_name + "</B> was added to the <B>" + getSiteNameFromId(jbsid) +
"</B> site.",syndicated);
  }

  private synchronized String doBlurbAdd(HttpServletRequest request, HttpServletResponse
response, String forwardLink, String forwardPost, boolean syndicated) {
    boolean errFlag = false;
    int id = 0;
    int count = 1;
    double tempval;
    Connection conn;
    Vector rs = null;
    BlurbDB bb = new BlurbDB();
    GregorianCalendar gc = new GregorianCalendar();
    int jbsid = Integer.parseInt(request.getParameter("jbsid").trim());
    int jbgid = Integer.parseInt(request.getParameter("jbgid").trim());

    String html = request.getParameter("html").trim();
    /*
    Pick a random id for blurb and make sure that a record with
    that id doesn't already exist.
    */
    conn = dataConnMan.getConnection(server, dbname);
    while (count > 0) {
      tempval = Math.floor(1000000 * Math.random()) ;
      id = (int)tempval;
      try {
        rs = bb.getAll(conn, "blurb_id = " + id);
      } catch(Exception e) {
        BlurbCommon.handleException(e);
        break;
      }
      count = rs.size();
    }
    dataConnMan.freeConnection(server, dbname, conn);
    if (count > 0)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred.  The new blurb was not added.",syndicated);

    //attempt to do the database insert of the new blurb record;
    bb.blurb_site_id = jbsid;
    bb.blurb_group_id = jbgid;
    bb.blurb_id = id;
    bb.html = html;
    bb.status = "Y";

    //bb.created_on = new java.util.Date();
    bb.created_on = new Timestamp(gc.getTime().getTime());
    bb.last_modified_on = new Timestamp(gc.getTime().getTime());

    conn = dataConnMan.getConnection(server, dbname);
    try {
      bb.insert(conn);
    } catch (Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "An error
occurred.  The new blurb was not added.",syndicated);
    else
      return viewGroupBlurbs(jbsid,jbgid,-1,forwardLink,forwardPost,"The new blurb was added
successfully.",syndicated);
  }

  private String doSiteChange(HttpServletRequest request, HttpServletResponse response, boolean
syndicated) {
    boolean errFlag = false;
    Connection conn;
    Vector rs = null;
    BlurbSiteDB bs = new BlurbSiteDB();
    int id = Integer.parseInt(request.getParameter("jbsid").trim());
    int tempid = id;
    String blurb_site_name = request.getParameter("blurb_site_name").trim();
    String description = request.getParameter("description").trim();
    String url = request.getParameter("url").trim();


    /*
    Test if site, desc, and http:// are valid
    */
    try {
      if (blurb_site_name.trim().equalsIgnoreCase("")) {
        return AdminMenuHTML.siteAddOrModify(this.serverRoot + this.thisServlet, id,
blurb_site_name, description, url, "An error occured. An invalid <B>Site Name or Site
Description</B> was entered.") ;
      }
      if (description.trim().equalsIgnoreCase("")) {
        return AdminMenuHTML.siteAddOrModify(this.serverRoot + this.thisServlet, id,
blurb_site_name, description, url, "An error occured. An invalid <B>Site Name or Site
Description</B> was entered.") ;
      }
    }
    catch(Exception e) {
      BlurbCommon.handleException(e);
      return AdminMenuHTML.siteAddOrModify(this.serverRoot + this.thisServlet, id,
blurb_site_name, description, url, "An error occured. An invalid <B>Site Name or Site
Description</B> was entered.") ;
    }

    /*
    Test for a valid URL
    */
    if (url.length() > 9) {
      if (url.substring(0,7).equalsIgnoreCase("http://")) {
      } else if(url.substring(0,8).equalsIgnoreCase("https://")) {
      } else {
        return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,id,blurb_site_name,description,url,"An error occurred.  An invalid <B>Site
URL</B> was entered.");
      }
    } else {
      return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,id,blurb_site_name,description,url,"An error occurred.  An invalid <B>Site
URL</B> was entered.");
    }
    if (!url.substring(0,5).equalsIgnoreCase("https")) {
      try {
        URL testURL = new URL(url);
      }
      catch(Exception e) {
        BlurbCommon.handleException(e);
        return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,id,blurb_site_name,description,url,"An error occurred.  An invalid <B>Site
URL</B> was entered.");
      }
    }

    /*
    Make sure that the new blurb_site_name doesn't already exist in the database.
    */
    conn = dataConnMan.getConnection(server, dbname);
    try {
      //blurb_site_name = new RE("'").substituteAll(blurb_site_name, "''");
      rs = bs.getAll(conn, "blurb_site_name = '" + new RE("'").substituteAll(blurb_site_name,
"''") + "'");
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred.  The site configuration
change was not completed.",syndicated);

    if(rs.size() > 0) {
      Enumeration e = rs.elements();
      while (e.hasMoreElements()) {
        BlurbSiteDB record = (BlurbSiteDB) e.nextElement();
        tempid = record.blurb_site_id;
      }
      if(tempid != id)
        return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,id,blurb_site_name,description,url,"The site <B>" + blurb_site_name + "</B>
already exists.  Please try again.");
    }

    //attempt to do the database update of the modified blurb_site record;
    bs.blurb_site_id = id;
    bs.blurb_site_name = blurb_site_name;
    bs.description = description;
    bs.url = url;
    bs.status = "Y";
    bs.created_on = new java.util.Date();
    bs.last_modified_on = new java.util.Date();

    conn = dataConnMan.getConnection(server, dbname);
    try {
      bs.update(conn);
    } catch (Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred.  The site configuration
was not changed.",syndicated);
    else
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "The site configuration for <B>" +
blurb_site_name + "</B> was changed successfully.",syndicated);
  }

  private String doBlurbChange(HttpServletRequest request, HttpServletResponse response, String
forwardLink, String forwardPost, boolean syndicated) {
    boolean errFlag = false;
    Connection conn;
    Vector rs = null;
    BlurbDB bb = new BlurbDB();
    int jbsid = Integer.parseInt(request.getParameter("jbsid").trim());
    int jbgid = Integer.parseInt(request.getParameter("jbgid").trim());
    int id = Integer.parseInt(request.getParameter("jbbid").trim());
    int tempid = id;
    String html = request.getParameter("html").trim();


    //attempt to do the database update of the modified blurb record;
    bb.blurb_id = id;
    bb.blurb_group_id = jbgid;
    bb.blurb_site_id = jbsid;
    bb.html = html;
    bb.status = "Y";
    bb.created_on = new java.util.Date();
    bb.last_modified_on = new java.util.Date();

    conn = dataConnMan.getConnection(server, dbname);
    try {
      bb.update(conn);
    } catch (Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "An error
occurred.  The blurb was not changed.",syndicated);
    else
```

```
      //return AdminMenuHTML.getAdminMenu(jbsid, this.serverRoot + this.thisServlet,
getSiteSelectList(jbsid,true), "The blurb was changed successfully.");
      return viewGroupBlurbs(jbsid,jbgid,-1,forwardLink,forwardPost,"The blurb was changed
successfully.",syndicated);
  }

  private String doSiteDelete(HttpServletRequest request, HttpServletResponse response, boolean
syndicated) {
    boolean errFlag = false;
    Connection conn;
    Vector rg = null, rb = null;
    BlurbSiteDB bs = new BlurbSiteDB();
    BlurbDB bb = new BlurbDB();
    BlurbGroupDB bg = new BlurbGroupDB();
    int id = Integer.parseInt(request.getParameter("jbsid").trim());

    //attempt to delete the blurb_site record and all associated blurb_group and blurb records;
    bs.blurb_site_id = id;
    conn = dataConnMan.getConnection(server, dbname);
    try {
      rb = bb.getAll(conn,"blurb_site_id=" + id);
      rg = bg.getAll(conn,"blurb_site_id=" + id);
      if(rb.size() > 0) {
        Enumeration q = rb.elements();
        while (q.hasMoreElements()) {
          BlurbDB b_record = (BlurbDB) q.nextElement();
          b_record.delete(conn);
        }
      }

      if(rg.size() > 0) {
        Enumeration x = rg.elements();
        while (x.hasMoreElements()) {
          BlurbGroupDB g_record = (BlurbGroupDB) x.nextElement();
          g_record.delete(conn);
        }
      }
      bs.delete(conn);

    } catch (Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred.  The site configuration
was not deleted.",syndicated);
    else
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "The site configuration was deleted
successfully.",syndicated);
  }

  private String doGroupDelete(int jbsid, String forwardLink, String forwardPost,
HttpServletRequest request, HttpServletResponse response, boolean syndicated) {
    boolean errFlag = false;
    Connection conn;
    Vector rb = null;
    BlurbDB bb = new BlurbDB();
    BlurbGroupDB bg = new BlurbGroupDB();
    int id = Integer.parseInt(request.getParameter("jbgid").trim());

    //attempt to delete the blurb_group record and all associated blurb records;
    bg.blurb_group_id = id;
    conn = dataConnMan.getConnection(server, dbname);
    try {
      rb = bb.getAll(conn,"blurb_site_id=" + jbsid + " and blurb_group_id = " + id);
      if(rb.size() > 0) {
        Enumeration q = rb.elements();
        while (q.hasMoreElements()) {
          BlurbDB b_record = (BlurbDB) q.nextElement();
          b_record.delete(conn);
        }
      }
      bg.delete(conn);

    } catch (Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred.  The group was not deleted.",syndicated);
    else
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"The group
was deleted successfully.",syndicated);
  }

  private String doBlurbDelete(int jbsid, int jbgid, int jbbid, String forwardLink, String
forwardPost, boolean syndicated) {
    boolean errFlag = false;
    Connection conn;
    Vector v = null;
    BlurbDB bb = new BlurbDB();

    //attempt to delete the blurb record
    bb.blurb_id = jbbid;
    conn = dataConnMan.getConnection(server, dbname);
    try {
      bb.delete(conn);
    } catch (Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred.  The blurb was not deleted.",syndicated);
    else
      return viewGroupBlurbs(jbsid,jbgid,-1,forwardLink,forwardPost,"The blurb was deleted
successfully.",syndicated);
  }


  //private String getSiteSelectList(int jbsid, boolean syndicated) {
    //return getSiteSelectList(jbsid,false,syndicated);
  //}

  private int getFirstSiteId() {
    boolean errFlag = false;
    boolean first = true;
    int id = -1;
    BlurbSiteDB bs = new BlurbSiteDB();
    Vector v = null;
    Connection conn = dataConnMan.getConnection(server, dbname);
    try {
      v = bs.getAll(conn, "1=1 order by blurb_site_name asc");
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);
  if(errFlag)
    return -1;

  Enumeration e = v.elements();
  if(v.size() > 0) {
    while (e.hasMoreElements()) {
      BlurbSiteDB record = (BlurbSiteDB) e.nextElement();
      if(first)
        id = record.blurb_site_id;
      first = false;
    }
  } else {
    id = -1;
  }
  return id;
}

private String getSiteNameFromId(int jbsid) {
  boolean errFlag = false;
  String blurb_site_name = "";
  BlurbSiteDB bs = new BlurbSiteDB();
  Vector v = null;
  Connection conn = dataConnMan.getConnection(server, dbname);
  try {
    v = bs.getAll(conn, "blurb_site_id =" + jbsid);
  } catch(Exception e) {
    BlurbCommon.handleException(e);
    errFlag = true;
  }
  dataConnMan.freeConnection(server, dbname, conn);

  if(errFlag)
    return "error";

  Enumeration e = v.elements();
  if(v.size() > 0) {
    while (e.hasMoreElements()) {
      BlurbSiteDB record = (BlurbSiteDB) e.nextElement();
      blurb_site_name = record.blurb_site_name;
    }
  } else {
    blurb_site_name = "error";
  }
  return blurb_site_name;
}

private String getGroupNameFromId(int jbgid) {
  boolean errFlag = false;
  String blurb_group_name = "";
  BlurbGroupDB bg = new BlurbGroupDB();
  Vector v = null;
  Connection conn = dataConnMan.getConnection(server, dbname);
  try {
    v = bg.getAll(conn, "blurb_group_id =" + jbgid);
  } catch(Exception e) {
    BlurbCommon.handleException(e);
    errFlag = true;
  }
  dataConnMan.freeConnection(server, dbname, conn);

  if(errFlag)
    return "error";

  Enumeration e = v.elements();
  if(v.size() > 0) {
    while (e.hasMoreElements()) {
      BlurbGroupDB record = (BlurbGroupDB) e.nextElement();
      blurb_group_name = record.blurb_group_name;
    }
    } else {
      blurb_group_name = "error";
    }
    return blurb_group_name;
  }

  private String getBlurbHTMLFromId(int jbbid) {
    boolean errFlag = false;
    String html = "";
    BlurbDB bb = new BlurbDB();
    Vector v = null;
    Connection conn = dataConnMan.getConnection(server, dbname);
    try {
      v = bb.getAll(conn, "blurb_id =" + jbbid);
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return "error";

    Enumeration e = v.elements();
    if(v.size() > 0) {
      while (e.hasMoreElements()) {
        BlurbDB record = (BlurbDB) e.nextElement();
        html = record.html;
      }
    } else {
      html = "error";
    }
    return html;
  }

  private String getSiteSelectList(int jbsid, boolean includeJavascript, boolean syndicated) {
    boolean errFlag = false;
    boolean first = true;
    BlurbSiteDB bs = new BlurbSiteDB();
    Vector v = null;

    if(syndicated)
      return getSiteNameFromId(jbsid);
    else {
      Connection conn = dataConnMan.getConnection(server, dbname);
      try {
        v = bs.getAll(conn, "1=1 order by blurb_site_name asc");
      } catch(Exception e) {
        BlurbCommon.handleException(e);
        errFlag = true;
      }
      dataConnMan.freeConnection(server, dbname, conn);

      if(errFlag)
        return "error";

      Enumeration e = v.elements();
      StringBuffer sb = new StringBuffer();
      StringBuffer jParams = new StringBuffer();
      StringBuffer js = new StringBuffer();

      if(v.size() > 0) {
        if(includeJavascript)
          sb.append("<SELECT NAME=\"jbsid\" onChange=\"jgo(this, 1, false)\">" + '\r');
        else
          sb.append("<SELECT NAME=\"jbsid\">" + '\r');
        while (e.hasMoreElements()) {
        BlurbSiteDB record = (BlurbSiteDB) e.nextElement();
          if(first)
            jParams.append("\"\",\"" + this.serverRoot + this.thisServlet + "?jbsid=" +
record.blurb_site_id + "\"");
          else
            jParams.append(",\"" + this.serverRoot + this.thisServlet + "?jbsid=" +
record.blurb_site_id + "\"");

          if((first) && (includeJavascript))
            sb.append("<option value=\"\">Select a site >></option>" + '\r');
          if(jbsid == record.blurb_site_id)
            sb.append("<option value=\"" + record.blurb_site_id + "\" selected>" +
record.blurb_site_name + "</option>" + '\r');
          else
            sb.append("<option value=\"" + record.blurb_site_id + "\">" + record.blurb_site_name
+ "</option>" + '\r');
          first = false;
        }
        sb.append("</SELECT>" + '\r');

        if(includeJavascript) {
          String redirParams = jParams.toString();
          js.append("<SCRIPT language=\"JavaScript1.2\">" + '\r');
          js.append("function buildArray() {" + '\r');
          js.append("var a = buildArray.arguments;" + '\r');
          js.append("for (i=0; i<a.length; i++) {" + '\r');
          js.append("this[i] = a[i];" + '\r');
          js.append("}" + '\r');
          js.append("this.length = a.length;" + '\r');
          js.append("}" + '\r');
          js.append("var urls1 = new buildArray(" + redirParams + ");" + '\r');
//        System.out.println(redirParams);
          js.append("function jgo(which, num, win) {" + '\r');
          js.append("n = which.selectedIndex;" + '\r');
          js.append("if (n != 0) {" + '\r');
          js.append("var url = eval(\"urls\" + num + \"[n]\")" + '\r');
          js.append("if (win) {" + '\r');
          js.append("openWindow(url);" + '\r');
          js.append("} else {" + '\r');
          js.append("location.href = url;" + '\r');
          js.append("}" + '\r');
          js.append("}" + '\r');
          js.append("}" + '\r');
          js.append("</SCRIPT>" + '\r');
        }

      } else {
        return "none";
      }
      return js.toString() + sb.toString();
    }
  }

  private String getGroupSelectList(int jbsid, int jbgid) {
    boolean errFlag = false;
    boolean first = true;
    BlurbGroupDB bg = new BlurbGroupDB();
    Vector v = null;
    Connection conn = dataConnMan.getConnection(server, dbname);
    try {
      v = bg.getAll(conn, "blurb_site_id = " + jbsid + " order by blurb_group_name asc");
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(errFlag)
      return "error";

    Enumeration e = v.elements();
    StringBuffer sb = new StringBuffer();
    if(v.size() > 0) {
      sb.append("<SELECT NAME=\"jbgid\">" + '\r');
      while (e.hasMoreElements()) {
        BlurbGroupDB record = (BlurbGroupDB) e.nextElement();
        //if(first)
          //sb.append("<option value=\"\">Select a site >></option>" + '\r');
        if(jbgid == record.blurb_group_id)
          sb.append("<option value=\"" + record.blurb_group_id + "\" selected>" +
record.blurb_group_name + "</option>" + '\r');
        else
          sb.append("<option value=\"" + record.blurb_group_id + "\">" + record.blurb_group_name
+ "</option>" + '\r');
        first = false;
      }
      sb.append("</SELECT>" + '\r');
    } else {
      return "none";
    }
    return sb.toString();
  }

  private String viewGroups(int jbsid, String forwardLink, String forwardPost, boolean
syndicated) {
    boolean errFlag = false;
    BlurbGroupDB bg = new BlurbGroupDB();
    BlurbDB bb = new BlurbDB();
    Vector v = null, z = null;
    Connection conn = dataConnMan.getConnection(server, dbname);
    try {
      v = bg.getAll(conn, "blurb_site_id = " + jbsid + " order by blurb_group_name asc");
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    Enumeration e = v.elements();
    StringBuffer sb = new StringBuffer();

    if(v.size() > 0) {
      conn = dataConnMan.getConnection(server, dbname);
      while (e.hasMoreElements()) {
        BlurbGroupDB record = (BlurbGroupDB) e.nextElement();
        try {
          z = bb.getAll(conn,"blurb_site_id = " + jbsid + " and blurb_group_id = " +
record.blurb_group_id);
          sb.append("<tr><td align=left>&nbsp;&nbsp;&nbsp;" + record.blurb_group_name +
"</td><td align=left>&nbsp;&nbsp;&nbsp;" + z.size() + "</td></tr>" + '\r');
        } catch(Exception ex) {
          BlurbCommon.handleException(ex);
          errFlag = true;
        }
      }
      dataConnMan.freeConnection(server, dbname, conn);
    } else {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"No groups
are currently configured.  Please add a new group.",syndicated);
    }
    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred in connecting to the database.",syndicated);
    else
      return
AdminMenuHTML.viewGroups(jbsid,forwardLink,forwardPost,sb.toString(),getSiteNameFromId(jbsid));
  }

  private String changeSiteDetails(HttpServletRequest request, HttpServletResponse response,
boolean syndicated) {
    boolean errFlag = false;
    int id = Integer.parseInt(request.getParameter("jbsid").trim());
    String blurb_site_name = "";
    String description = "";
    String url = "";
    Vector rs = null;
    BlurbSiteDB bs = new BlurbSiteDB();

    Connection conn = dataConnMan.getConnection(server, dbname);
    try {
      rs = bs.getAll(conn,"blurb_site_id = " + id);
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);
    if(errFlag)
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred in connecting to the
database.",syndicated);

    if(rs.size() > 0) {
      Enumeration e = rs.elements();
      while (e.hasMoreElements()) {
        BlurbSiteDB record = (BlurbSiteDB) e.nextElement();
        blurb_site_name = record.blurb_site_name;
        description = record.description;
        url = record.url;
      }
    } else {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "The site record selected no longer exists
in the database.",syndicated);
    }
    return AdminMenuHTML.siteAddOrModify(this.serverRoot +
this.thisServlet,id,blurb_site_name,description,url,"");
  }

  private String changeSiteSelect(boolean syndicated) {
    String param = getSiteSelectList(-1, false, syndicated);
    if(param.equals("error")) {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred in connecting to the
database.",syndicated);
    } else if(param.equals("none")) {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "No sites are currently configured.  Please
configure a new site.",syndicated);
    } else {
      return AdminMenuHTML.selectSite(this.serverRoot + this.thisServlet,"chg",param);
    }
  }

  private String genSiteCodeSelect(boolean syndicated) {
    String param = getSiteSelectList(-1, false, syndicated);
    if(param.equals("error")) {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred in connecting to the
database.",syndicated);
    } else if(param.equals("none")) {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "No sites are currently configured.  Please
configure a new site.",syndicated);
    } else {
      return AdminMenuHTML.selectSite(this.serverRoot + this.thisServlet,"gensitecode",param);
    }
  }
/*
  private String changeGroupSelect(boolean syndicated) {
    String param = getSiteSelectList(-1, false, syndicated);
    if(param.equals("error")) {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred in connecting to the
database.",syndicated);
    } else if(param.equals("none")) {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "No sites are currently configured.  Please
configure a new site.",syndicated);
    } else {
      return AdminMenuHTML.selectSite(this.serverRoot + this.thisServlet,"chg",param);
    }
  }
*/
  private String deleteSiteSelect(boolean syndicated) {
    String param = getSiteSelectList(-1, false, syndicated);
    if(param.equals("error")) {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred in connecting to the
database.",syndicated);
    } else if(param.equals("none")) {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "No sites are currently configured.  Please
configure a new site.",syndicated);
    } else {
      return AdminMenuHTML.selectSite(this.serverRoot + this.thisServlet,"del",param);
    }
  }

  private String addBlurb(int jbsid, String forwardLink, String forwardPost, boolean syndicated)
{
    String param = getGroupSelectList(jbsid, -1);
    if(param.equals("error")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "An error
occurred in connecting to the database.",syndicated);
    } else if(param.equals("none")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "No blurb
groups exist for the current site. <BR>Please add a new blurb group before adding a
blurb.",syndicated);
    } else {
      return
AdminMenuHTML.blurbAddOrModify(jbsid,-1,-1,forwardLink,forwardPost,getSiteNameFromId(jbsid),"",pa
ram,"");
    }
  }

  private String copyBlurb(int jbsid, int jbgid, int jbbid, String forwardLink, String
forwardPost, boolean syndicated) {
    String param = getGroupSelectList(jbsid, jbgid);
    String html = getBlurbHTMLFromId(jbbid);
    if(param.equals("error")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "An error
occurred in connecting to the database.",syndicated);
    } else if(param.equals("none")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "No blurb
groups exist for the current site. <BR>Please add a new blurb group before adding a
blurb.",syndicated);
    } else {
      return
AdminMenuHTML.blurbAddOrModify(jbsid,jbgid,-1,forwardLink,forwardPost,getSiteNameFromId(jbsid),ht
ml,param,"");
    }
  }

  private String changeBlurb(int jbsid, int jbgid, int jbbid, String forwardLink, String
forwardPost, boolean syndicated) {
    String param = getGroupSelectList(jbsid, jbgid);
    String html = getBlurbHTMLFromId(jbbid);
    if(param.equals("error")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "An error
occurred in connecting to the database.",syndicated);
    } else if(param.equals("none")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "No blurb
groups exist for the current site. <BR>Please add a new blurb group before adding a
blurb.",syndicated);
    } else {
      return
AdminMenuHTML.blurbAddOrModify(jbsid,jbgid,jbbid,forwardLink,forwardPost,getSiteNameFromId(jbsid)
,html,param,"");
    }
  }

  private String deleteGroupSelect(int jbsid, String forwardLink, String forwardPost, boolean
syndicated) {
    String param = getGroupSelectList(jbsid, -1);
    if(param.equals("error")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred in connecting to the database.",syndicated);
    } else if(param.equals("none")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"No groups
are currently configured.  Please add a new group.",syndicated);
    } else {
      return
AdminMenuHTML.selectGroup(jbsid,forwardLink,forwardPost,"delbg",param,getSiteNameFromId(jbsid));
    }
  }

  private String viewBlurbSelect(int jbsid, String forwardLink, String forwardPost, boolean
syndicated) {
    String param = getGroupSelectList(jbsid, -1);
    if(param.equals("error")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred in connecting to the database.",syndicated);
    } else if(param.equals("none")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "No
groups are currently configured.  Please add a new group.",syndicated);
    } else {
      return
AdminMenuHTML.selectGroup(jbsid,forwardLink,forwardPost,"viewbb",param,getSiteNameFromId(jbsid));
    }
  }


  private String viewGroupBlurbs(int jbsid, int jbgid, int jbbid, String forwardLink, String
forwardPost, String message, boolean syndicated) {
    boolean errFlag = false;
    BlurbDB bb = new BlurbDB();
    Vector v = null;
    Connection conn = dataConnMan.getConnection(server, dbname);
    String q = "?";
    if(forwardLink.indexOf("?") > -1)
      q = "&";
    try {
      if(jbbid > 0)
        v = bb.getAll(conn, "blurb_site_id = " + jbsid + " and blurb_group_id = " + jbgid + "
and blurb_id = " + jbbid + " order by created_on desc");
      else
        v = bb.getAll(conn, "blurb_site_id = " + jbsid + " and blurb_group_id = " + jbgid + "
order by created_on desc");
    } catch(Exception ex) {
      BlurbCommon.handleException(ex);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    Enumeration e = v.elements();
    StringBuffer sb = new StringBuffer();

    if(v.size() > 0) {
      conn = dataConnMan.getConnection(server, dbname);
      while (e.hasMoreElements()) {
        BlurbDB record = (BlurbDB) e.nextElement();
        if(jbbid > 0) {
          sb.append("<tr><td valign=top align=center>N/A</td>");
        } else {
          sb.append("<tr><td valign=top align=center>[<A HREF=\"" + forwardLink + q +
"jbact=copybb&jbsid=" + jbsid + "&jbgid=" + jbgid + "&jbbid=" + record.blurb_id +
"\"><B>Copy</B></A>]<BR>");
          sb.append("[<A HREF=\"" + forwardLink + q + "jbact=chgbb&jbsid=" + jbsid + "&jbgid=" +
jbgid + "&jbbid=" + record.blurb_id + "\"><B>Modify</B></A>]<BR>");
          sb.append("[<A HREF=\"" + forwardLink + q + "jbact=delbb&jbsid=" + jbsid + "&jbgid=" +
jbgid + "&jbbid=" + record.blurb_id + "\"><B>Delete</B></A>]</td>");
        }
        sb.append("<td valign=top align=left>" + HTMLQuoter.toQuoted(record.html) + "</td><td
valign=top align=left>" + record.html + "</td></tr>" + '\r');
      }
      dataConnMan.freeConnection(server, dbname, conn);
    } else {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "The
group <B>" + getGroupNameFromId(jbgid) + "</B> doesn't contain any HTML blurbs.",syndicated);
    }
    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated), "An error
occurred in connecting to the database.",syndicated);
    else
      if(jbbid > 0)
        return
AdminMenuHTML.deleteBlurb(jbsid,jbgid,jbbid,forwardLink,forwardPost,sb.toString(),getSiteNameFrom
Id(jbsid),getGroupNameFromId(jbgid), message);
      else
        return
AdminMenuHTML.viewGroupBlurbs(jbsid,jbgid,forwardLink,forwardPost,sb.toString(),getSiteNameFromId
(jbsid),getGroupNameFromId(jbgid), message);
  }

  private String generateBlurbCode(int jbsid, String forwardLink, String forwardPost, boolean
syndicated) {
    String param = getGroupSelectList(jbsid, -1);
    if(param.equals("error")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred in connecting to the database.",syndicated);
    } else if(param.equals("none")) {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"No groups
are currently configured.  Please add a new group.",syndicated);
    } else {
      return AdminMenuHTML.selectGroup(jbsid,forwardLink,forwardPost,"genbcode",param,
getSiteNameFromId(jbsid));
    }
  }

  private String deleteSiteDetails(HttpServletRequest request, HttpServletResponse response,
boolean syndicated) {
    boolean errFlag = false;
    int id = Integer.parseInt(request.getParameter("jbsid").trim());
    String blurb_site_name = "";
    String description = "";
    String url = "";
    Vector rs = null;
    BlurbSiteDB bs = new BlurbSiteDB();

    Connection conn = dataConnMan.getConnection(server, dbname);
    try {
      rs = bs.getAll(conn,"blurb_site_id = " + id);
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);
    if(errFlag)
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "An error occurred in connecting to the
database.",syndicated);

    if(rs.size() > 0) {
      Enumeration e = rs.elements();
      while (e.hasMoreElements()) {
        BlurbSiteDB record = (BlurbSiteDB) e.nextElement();
        blurb_site_name = record.blurb_site_name;
        description = record.description;
        url = record.url;
      }
    } else {
      return AdminMenuHTML.getAdminMenu(getFirstSiteId(), this.serverRoot + this.thisServlet,
getSiteSelectList(getFirstSiteId(),true,syndicated), "The site record selected no longer exists
in the database.",syndicated);
    }
    return AdminMenuHTML.siteDelete(this.serverRoot +
this.thisServlet,id,blurb_site_name,description,url,"");
  }


  private String deleteGroupDetails(int jbsid, String forwardLink, String forwardPost,
HttpServletRequest request, HttpServletResponse response, boolean syndicated) {
    boolean errFlag = false;
    int id = Integer.parseInt(request.getParameter("jbgid").trim());
    String blurb_group_name = "";
    Vector rs = null;
    BlurbGroupDB bg = new BlurbGroupDB();

    Connection conn = dataConnMan.getConnection(server, dbname);
    try {
      rs = bg.getAll(conn,"blurb_group_id = " + id);
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);
    if(errFlag)
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"An error
occurred in connecting to the database.",syndicated);

    if(rs.size() > 0) {
      Enumeration e = rs.elements();
      while (e.hasMoreElements()) {
        BlurbGroupDB record = (BlurbGroupDB) e.nextElement();
        blurb_group_name = record.blurb_group_name;
      }
    } else {
      return
AdminMenuHTML.getAdminMenu(jbsid,forwardLink,getSiteSelectList(jbsid,true,syndicated),"The group
record selected no longer exists in the database.",syndicated);
    }
    return
AdminMenuHTML.groupDelete(jbsid,id,forwardLink,forwardPost,blurb_group_name,"",getSiteNameFromId(
jbsid));
  }
  private void validateSite() {

  }

}
```

```
//a test comment

package com.activedatax.products.Blurb;

import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.util.*;
import java.sql.*;
import java.net.*;
import gnu.regexp.*;
import com.activedatax.sql.HttpServletDb;
import com.activedatax.products.Blurb.dbmodules.BlurbDB;


/**
 This is a rewrite of the PublishNow 2.x jSyndicate servlet for use with Active Data Publisher
3.0 and Community Exchange (AffiliateNow)
 @author John E. Wetzel
 @version 1.0
 @date 15-MAY-2000
*/

public class JBlurb extends HttpServletDb implements SingleThreadModel {
  private BlurbCommon mycommon;
  private String server = "" ;
  private String dbname = "" ;
  private String thisServlet = "";
  private String serverRoot = "";


  public void init(ServletConfig config) throws ServletException {
    super.init(config);

    //USE BlurbCommon.class TO GET PROPERTIES -- SERVER & DATABASE NAME
    mycommon = new BlurbCommon();
    Properties p = mycommon.getProps();
    serverRoot = p.getProperty("server.root");
    server = p.getProperty ("default.server");
    dbname = p.getProperty ("default.dbname");

    //store the alias in
    p = mycommon.getAliases();
    thisServlet = p.getProperty("JBlurb");

  }

  //Process the HTTP Get request
  public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String outputHTML = "";
    String param = "";
    String action = request.getParameter("jbact");

    outputHTML =
convertTojs(getRandomBlurb(Integer.parseInt(request.getParameter("jbsid").trim()),
Integer.parseInt(request.getParameter("jbgid").trim())));

    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    out.println(outputHTML);
    return;
  }

  public String getRandomBlurb(int blurb_site_id, int blurb_group_id) {
    boolean errFlag = false;
    int count = 0;
    int tempid, blurb_id;
    double tempval;
    String blurbHTML = "", tempStr = "";
    BlurbDB bb = new BlurbDB();
    Vector rs = null;
    Hashtable idHash = new Hashtable();

    Connection conn = dataConnMan.getConnection(server, dbname);
    String sql = "select blurb.blurb_id id from blurb_site, blurb_group, blurb "
      + " where upper(blurb_site.status) = 'Y' and upper(blurb_group.status) = 'Y' and
upper(blurb.status) = 'Y'"
      + " and blurb.blurb_site_id = blurb_group.blurb_site_id and blurb.blurb_site_id =
blurb_site.blurb_site_id"
      + " and blurb.blurb_group_id = blurb_group.blurb_group_id"
      + " and blurb.blurb_site_id = ? and blurb.blurb_group_id = ?";

    try {
      PreparedStatement stmt = conn.prepareStatement(sql);
      stmt.clearParameters();
      stmt.setInt(1, blurb_site_id);
      stmt.setInt(2, blurb_group_id);
      ResultSet rr = stmt.executeQuery() ;

      while (rr.next()) {
        count++;
        idHash.put(String.valueOf(count),rr.getString("id"));
      }
      rr.close();
      stmt.close();

    } catch (Exception e) {
        BlurbCommon.handleException(e);
        errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);

    if(count > 0) {
      tempval = Math.floor(count * Math.random());
      tempid = (int)tempval + 1;
//      System.out.println(tempid);
      tempStr = idHash.get(String.valueOf(tempid)).toString();
      blurb_id = Integer.parseInt(tempStr);
//      System.out.println(blurb_id);

      conn = dataConnMan.getConnection(server, dbname);
      try {
        rs = bb.getAll(conn,"blurb_id =" + blurb_id);
      } catch(Exception e) {
        BlurbCommon.handleException(e);
        errFlag = true;
      }
      dataConnMan.freeConnection(server, dbname, conn);

      Enumeration e = rs.elements();
      while (e.hasMoreElements()) {
        BlurbDB record = (BlurbDB) e.nextElement();
        blurbHTML = record.getHtml();
      }

    }
    if(errFlag)
      return "<!--- database error --->";
    else
      return blurbHTML;
  }



  public String convertTojs(String HTMLtext) {

    try {
      HTMLtext = new
RE("\"com.activedatax.products.Affiliate.Datamodules.RetrieveImage").substituteAll(HTMLtext,
"\"" + serverRoot + "com.activedatax.products.Affiliate.Datamodules.RetrieveImage") ;
      HTMLtext = new RE("[Ss][Rr][Cc] *=
*\"com.activedatax.products.Affiliate.Datamodules.RetrieveImage").substituteAll(HTMLtext,"src=\""
 + serverRoot + "com.activedatax.products.Affiliate.Datamodules.RetrieveImage");
      HTMLtext = new RE("[Ss][Rr][Cc] *=
*\"com.rnci.products.DataModules.RetrieveImage").substituteAll(HTMLtext,"src=\"" + serverRoot +
"com.rnci.products.DataModules.RetrieveImage");
      HTMLtext = new
RE("\"com.rnci.products.DataModules.RetrieveAttachment").substituteAll(HTMLtext,"\"" +
serverRoot + "com.rnci.products.DataModules.RetrieveAttachment");
    }
    catch(Exception e) {
      BlurbCommon.handleException(e);
    }


    String scriptHTML = "";
    int startSearchAt = 0;
    int scriptLoc = indexOfIgnoreCase(HTMLtext,"<SCRIPT",startSearchAt);
    if(scriptLoc > -1) {  //Check for client scripts and separate them from regular HTML
      try {
        int endScriptLoc;
        int articleLength = HTMLtext.length();
        StringBuffer sbArticle = new StringBuffer(articleLength + 1);
        StringBuffer sbScripts = new StringBuffer();
        while(scriptLoc > -1) {
          endScriptLoc = indexOfIgnoreCase(HTMLtext,"</SCRIPT>",scriptLoc);
          sbArticle.append(HTMLtext.substring(startSearchAt,scriptLoc));

sbScripts.append(HTMLtext.substring((indexOfIgnoreCase(HTMLtext,">",scriptLoc)+1),endScriptLoc));
          sbScripts.append('\n');
          sbScripts.append('\r');
          //System.out.println("The HTML: " + HTMLtext.substring(startSearchAt,scriptLoc));
          //System.out.println("The Script: " +
HTMLtext.substring((indexOfIgnoreCase(HTMLtext,">",scriptLoc)+1),endScriptLoc));

          startSearchAt = endScriptLoc + 9;
          scriptLoc = indexOfIgnoreCase(HTMLtext,"<SCRIPT",startSearchAt);
        }
        sbArticle.append(HTMLtext.substring(startSearchAt,articleLength - 1));
        //System.out.println(sbArticle.toString());
        //System.out.println(sbScripts.toString());
        scriptHTML = sbScripts.toString();   //contains just the scripts' code
        HTMLtext = sbArticle.toString();    //contains just the article HTML
      }
      catch(Exception e) {
        BlurbCommon.handleException(e);
      }
    }

    HTMLtext = HTMLtext.replace('\r', ' ');
    HTMLtext = HTMLtext.replace('\n', ' ');
    try {
      HTMLtext = swapStrings(HTMLtext,"\\","\\\\");
      HTMLtext = swapStrings(HTMLtext,"\'","\\\'");
      HTMLtext = swapStrings(HTMLtext,"\"","\\\"");
    }
    catch(Exception e) {
      BlurbCommon.handleException(e);
    }

    return scriptHTML + " document.write ('"  + HTMLtext + "'); ";

  }

  public static String swapStrings(String TextIn, String OldString, String NewString) {
    int OldStringStartAt;
    int OldStringLength = OldString.length();
    int NewStringLength = NewString.length();
    String TempText = TextIn;
    OldStringStartAt = indexOfIgnoreCase(TempText, OldString, 0);
    while (OldStringStartAt != -1) {
      TempText = TempText.substring( 0, OldStringStartAt) + NewString +
TempText.substring(OldStringStartAt + OldStringLength);
      OldStringStartAt = indexOfIgnoreCase(TempText, OldString, OldStringStartAt +
NewStringLength);
    }
    return TempText;
  }

  public static int indexOfIgnoreCase(String TempText, String subString, int StartAt) {
    return TempText.toLowerCase().indexOf( subString.toLowerCase(), StartAt);
  }

}
```

```
//A simple comment

package com.activedatax.products.Blurb;

import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.util.*;
import java.sql.*;
import com.activedatax.products.Blurb.*;
import com.activedatax.products.Blurb.dbmodules.*;
import gnu.regexp.*;
import com.activedatax.net.url.Util;
import java.net.MalformedURLException;
import com.activedatax.utils.HTMLQuoter;

public class JBlurbAdmin extends AdminMenu {
  private BlurbCommon mycommon;
  private String server = "" ;
  private String dbname = "" ;
  private String thisServlet = "";
  private String serverRoot = "";
  private String fPost = "";

  private static int itemsToKeep = 400, minutesToLive = 10;   //will be set by init() later
  private static long lastModified;
  private static Vector contents = new Vector();
  private Sentinel sentinel = null ;


  public void init(ServletConfig config) throws ServletException {
    super.init(config);

    System.out.println("Init Method executed");
    sentinel = new Sentinel(itemsToKeep, minutesToLive);
    //USE BlurbCommon.class TO GET PROPERTIES
    mycommon = new BlurbCommon();
    Properties p = mycommon.getProps();
    serverRoot = p.getProperty("server.root");
    server = p.getProperty ("default.server");
    dbname = p.getProperty ("default.dbname");

    try {
      this.itemsToKeep = Integer.parseInt(p.getProperty("cache.items"));
    } catch (NumberFormatException e) {
      System.err.println(e.getMessage());
      e.printStackTrace();
      this.itemsToKeep = 400;
    }
    try {
      this.minutesToLive = Integer.parseInt(p.getProperty("cache.minutes"));
    } catch (NumberFormatException e) {
      System.err.println(e.getMessage());
      e.printStackTrace();
      this.minutesToLive = 10;
    }


    //store the alias in
    p = mycommon.getAliases();
    thisServlet = p.getProperty("JBlurbAdmin");

    fPost = serverRoot + thisServlet;
  }

  /**Process the HTTP Get request*/
  public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String outputHTML = "", documentURL = "", documentHost = "", jbact = "", jpostbact = "",
jbts = "";
```

```
    String contId;
    boolean errFlag = false;
    int jbsid = -1;
    Content cont;

    response.setContentType("text/html");
    PrintWriter out = response.getWriter();

    HttpSession session = request.getSession (false);
      if (session == null) session = request.getSession(true);

    documentURL = removeAllParams(request.getParameter("jbdurl").trim());
    //get the blurb site id from the request parameters
    try {
      jbsid = Integer.parseInt(request.getParameter("jbsid").trim());
    } catch(Exception e) { errFlag = true; }
    if(!errFlag) errFlag = validateHost(jbsid,parseHostFromURL(documentURL));
    if (errFlag)
      outputHTML = "document.write('<B>This web site is not authorized to view the content
requested.<\\/B>'); ";
    else {
      jbact = request.getParameter("jbact");
      if(jbact != null) {
        if(jbact.equalsIgnoreCase("getpostdata")) {
          jbts = request.getParameter("jbts").trim();
          jpostbact = request.getParameter("jpostbact").trim();
          contId = session.getId() + "," + jbsid + "," + documentURL + "," + jpostbact + "," +
jbts;
          //System.out.println(contId);
          cont = lookup(contId);
          if (cont != null)
            outputHTML = cont.detail;
          else
            outputHTML = convertTojs(doBlurb(request, response, documentURL, this.fPost, true));
          out.println(outputHTML);
          return;
        }
      }
      outputHTML = convertTojs(doBlurb(request, response, documentURL, this.fPost, true));
    }
    out.println(outputHTML);
    return;

  }
  /**Process the HTTP Post request*/
  public void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String outputHTML = "", referringURL = "", redirectURL = "", jpostbact = "", q = "?";
    String contId;
    boolean errFlag = false;
    int jbsid = -1;
    Content cont;
    HttpSession session = request.getSession (false);
      if (session == null) session = request.getSession(true);

    //get the referring URL from the request header and use as the forward link
    referringURL = removeAllParams(request.getHeader("REFERER"));
    if(referringURL.equals("error")) errFlag = true;


    //get the blurb site id and the form post action from the request parameters
    try {
      jbsid = Integer.parseInt(request.getParameter("jbsid").trim());
      jpostbact = request.getParameter("jbact".trim());
    } catch(Exception e) { errFlag = true; }

    if(errFlag == false) errFlag = validateHost(jbsid,parseHostFromURL(referringURL));
    if(!errFlag) {

      //process the posted form and convert to JS for output
      outputHTML = convertTojs(doBlurb(request, response, referringURL, this.fPost, true));

      //store the resulting JS in a Vector for later retrieval via browser JavaScript HTTP GET
      if(referringURL.indexOf("?") > -1)
        q = "&";
      lastModified = System.currentTimeMillis();
      redirectURL = referringURL + q + "jbsid=" + jbsid + "&jbact=getpostdata&jpostbact=" +
jpostbact + "&jbts=" + lastModified;

      contId = session.getId() + "," + jbsid + "," + referringURL + "," + jpostbact + "," +
lastModified;
      //System.out.println(contId);
      cont = new Content(contId, outputHTML, lastModified);
      contents.addElement(cont);

    } else {  //there has been an error or the referring URL is not allowed
      redirectURL = referringURL;
    }

    //redirect the browser to the referring page with the appropriate parameters needed to
retrieve the JS from the Vector
    response.sendRedirect(redirectURL);
    return;
  }
  /**Clean up resources*/
  public void destroy() {
    System.out.println("Destroy method running");
    sentinel.quit = true;
    contents = null;
  }

  public String convertTojs(String HTMLtext) {
    try {
      HTMLtext = new
RE("\"com.activedatax.products.Affiliate.Datamodules.RetrieveImage").substituteAll(HTMLtext,
"\"" + serverRoot + "com.activedatax.products.Affiliate.Datamodules.RetrieveImage") ;
      HTMLtext = new RE("[Ss][Rr][Cc] *=
*\"com.activedatax.products.Affiliate.Datamodules.RetrieveImage").substituteAll(HTMLtext,"src=\""
 + serverRoot + "com.activedatax.products.Affiliate.Datamodules.RetrieveImage");
      HTMLtext = new RE("[Ss][Rr][Cc] *=
*\"com.rnci.products.DataModules.RetrieveImage").substituteAll(HTMLtext,"src=\"" + serverRoot +
"com.rnci.products.DataModules.RetrieveImage");
      HTMLtext = new
RE("\"com.rnci.products.DataModules.RetrieveAttachment").substituteAll(HTMLtext,"\"" +
serverRoot + "com.rnci.products.DataModules.RetrieveAttachment");
    }
    catch(Exception e) {
        System.err.println(e.getMessage());
        e.printStackTrace();
    }

    String scriptHTML = "";
    int startSearchAt = 0;
    int scriptLoc = indexOfIgnoreCase(HTMLtext,"<SCRIPT",startSearchAt);
    if(scriptLoc > -1) {  //Check for client scripts and separate them from regular HTML
      try {
        int endScriptLoc;
        int articleLength = HTMLtext.length();
        StringBuffer sbArticle = new StringBuffer(articleLength + 1);
        StringBuffer sbScripts = new StringBuffer();
        while(scriptLoc > -1) {
          endScriptLoc = indexOfIgnoreCase(HTMLtext,"</SCRIPT>",scriptLoc);
          sbArticle.append(HTMLtext.substring(startSearchAt,scriptLoc));

sbScripts.append(HTMLtext.substring((indexOfIgnoreCase(HTMLtext,">",scriptLoc)+1),endScriptLoc));
          sbScripts.append('\n');
          sbScripts.append('\r');
          //System.out.println("The HTML: " + HTMLtext.substring(startSearchAt,scriptLoc));
          //System.out.println("The Script: " +
HTMLtext.substring((indexOfIgnoreCase(HTMLtext,">",scriptLoc)+1),endScriptLoc));
```

```
          startSearchAt = endScriptLoc + 9;
          scriptLoc = indexOfIgnoreCase(HTMLtext,"<SCRIPT",startSearchAt);
        }
        sbArticle.append(HTMLtext.substring(startSearchAt,articleLength - 1));
        //System.out.println(sbArticle.toString());
        //System.out.println(sbScripts.toString());
        scriptHTML = sbScripts.toString();   //contains just the scripts' code
        HTMLtext = sbArticle.toString();    //contains just the article HTML
      }
      catch(Exception e) {
        System.err.println(e.getMessage());
        e.printStackTrace();
      }
    }

    HTMLtext = HTMLtext.replace('\r', ' ');
    HTMLtext = HTMLtext.replace('\n', ' ');
    try {
      HTMLtext = swapStrings(HTMLtext,"\\","\\\\");
      HTMLtext = swapStrings(HTMLtext,"\'","\\\'");
      HTMLtext = swapStrings(HTMLtext,"\"","\\\"");
    }
    catch(Exception e) {
        System.err.println(e.getMessage());
        e.printStackTrace();
    }

    return scriptHTML + " document.write ('"  + HTMLtext + "'); ";

  }

  public static String swapStrings(String TextIn, String OldString, String NewString) {
    int OldStringStartAt;
    int OldStringLength = OldString.length();
    int NewStringLength = NewString.length();
    String TempText = TextIn;
    OldStringStartAt = indexOfIgnoreCase(TempText, OldString, 0);
    while (OldStringStartAt != -1) {
      TempText = TempText.substring( 0, OldStringStartAt) + NewString +
TempText.substring(OldStringStartAt + OldStringLength);
      OldStringStartAt = indexOfIgnoreCase(TempText, OldString, OldStringStartAt +
NewStringLength);
    }
    return TempText;
  }

  public static int indexOfIgnoreCase(String TempText, String subString, int StartAt) {
    return TempText.toLowerCase().indexOf( subString.toLowerCase(), StartAt);
  }

  private String removeAllParams(String URL) {
    String tempURL = URL;
    Util myUtil = new Util();
    try {
      myUtil.setOriginalURL(URL);
      myUtil.setParamToRemove("jbdurl");
      tempURL = myUtil.getRemovedParamURL();
      myUtil.setOriginalURL(tempURL);
      myUtil.setParamToRemove("jbrand");
      tempURL = myUtil.getRemovedParamURL();
      myUtil.setOriginalURL(tempURL);
      myUtil.setParamToRemove("jbact");
      tempURL = myUtil.getRemovedParamURL();
      myUtil.setOriginalURL(tempURL);
      myUtil.setParamToRemove("jbsid");
      tempURL = myUtil.getRemovedParamURL();
      myUtil.setOriginalURL(tempURL);
      myUtil.setParamToRemove("jbgid");
      tempURL = myUtil.getRemovedParamURL();
      myUtil.setOriginalURL(tempURL);
      myUtil.setParamToRemove("jbbid");
      tempURL = myUtil.getRemovedParamURL();
      myUtil.setOriginalURL(tempURL);
      myUtil.setParamToRemove("jpostbact");
      tempURL = myUtil.getRemovedParamURL();
      myUtil.setOriginalURL(tempURL);
      myUtil.setParamToRemove("jbts");
      tempURL = myUtil.getRemovedParamURL();

    } catch (MalformedURLException mue) {
      mue.printStackTrace();
      //put in garbage URL that will never match JW 12/4/00
      tempURL = "error";
    }

    //System.out.println(tempURL);
    return tempURL;
  }

  private String parseHostFromURL(String targetURL) {
    StringTokenizer tokenizer = new StringTokenizer(targetURL, "/");
    int tokencount = tokenizer.countTokens();
    int i;
    String returnHost = "";
    if (tokencount > 1) {
      for (i = 1; i < 3; i++) returnHost = tokenizer.nextToken();
    } else {
      returnHost = "";
    }
    return returnHost;
  }

  private boolean validateHost(int jbsid, String targetHost) {
    //false: URL - Site match found
    //true: bad URL
    boolean errFlag = false;
    BlurbSiteDB bs = new BlurbSiteDB();
    Vector v = null;
    Connection conn = dataConnMan.getConnection(server, dbname);
    try {
      v = bs.getAll(conn, "blurb_site_id =" + jbsid + " and upper(url) like '%" +
targetHost.toUpperCase() + "%'");
    } catch(Exception e) {
      BlurbCommon.handleException(e);
      errFlag = true;
    }
    dataConnMan.freeConnection(server, dbname, conn);
    if(v.size() < 1) errFlag = true;

    return errFlag;
  }

  Content lookup(String contentID) {
    Content cont;
    int index = -1;
    for (int i=0; i<contents.size(); ++i) {
      cont = (Content)contents.elementAt(i);
      if (contentID.equals(cont.contentID)) return (Content)contents.elementAt(i);
    }
    return null;
  }

  class Content {
    String contentID, detail;
    long timestamp;
    Content(String contentID, String detail, long timestamp) {
      this.contentID = contentID;
      this.detail = detail;
      this.timestamp = timestamp/60000;  //converts milliseconds to minutes
    }
  }

  private class Sentinel extends Thread {
    int itemsToKeep;
    int minutesToLive;
    boolean quit = false;

    Sentinel(int itemsToKeep, int minutesToLive) {
      System.out.println("Sentinel Constructor ");
      this.itemsToKeep = itemsToKeep;
      this.minutesToLive = minutesToLive;
      setPriority(Thread.MIN_PRIORITY);
      start();
    }

    public void run() {
      int itemsToRemove;
      while (!quit) { // this keeps cleanup alive until servlet is destroyed
        freshen();
        if (contents.size() > itemsToKeep) trim();
        //System.out.println(contents.size());
        //System.gc();
        try {
          Thread.sleep(5000);
        }
        catch (InterruptedException ex) {
        System.err.println(ex.getMessage());
        ex.printStackTrace();
        }
        //System.out.println("Sentinel ran at:" + System.currentTimeMillis());
      }
    }

    private void trim() {
      int itemsToRemove = contents.size() - itemsToKeep;
      int trimmed = 0;
      for (int i=0; i<itemsToRemove; ++i) {
        contents.removeElementAt(i);
        //System.out.println("Removed: " + contents.elementAt(i).toString());
        Thread.yield();
        trimmed++;
      }
      if (trimmed > 10) contents.trimToSize();
    }

    private void freshen() {
      long currentTime = System.currentTimeMillis()/60000;
      Content cont;
      for (int i=0; i<contents.size(); ++i) {
        cont = (Content) contents.elementAt(i);
        if (cont.timestamp + minutesToLive < currentTime) {
          contents.removeElementAt(i);
          //System.out.println("Expired: " + cont.contentID);
          Thread.yield();
        }
      }
    }
  }

}
```